

EXHIBIT A

PUBLIC VERSION

**UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C. 20436**

In the Matter of

**CERTAIN GAMING AND
ENTERTAINMENT CONSOLES,
RELATED SOFTWARE, AND
COMPONENTS THEREOF**

Investigation No. 337-TA-752

INITIAL DETERMINATION

Administrative Law Judge David P. Shaw

Pursuant to the notice of investigation, 75 Fed. Reg. 80843 (2010), this is the Initial Determination in *Certain Gaming and Entertainment Consoles, Related Software, and Components Thereof*, United States International Trade Commission Investigation No. 337-TA-752.

It is held that a violation of section 337 of the Tariff Act, as amended, has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation, of certain gaming and entertainment consoles, related software, or components thereof that infringe asserted claims 1 and 12 of U.S. Patent No. 6,069,896; asserted claims 7, 8, and 10 of U.S. Patent No. 7,162,094; claim 2 of U.S. Patent No. 6,980,596; and asserted claims 12 and 13 of U.S. Patent No. 5,357,571. A violation of section 337 has not occurred with respect to asserted claim 1 of U.S. Patent No. 6,980,596, or asserted claims 6, 8, or 17 of U.S. Patent No. 5,319,712.

PUBLIC VERSION**TABLE OF CONTENTS**

I.	Background	1
	A. Institution of the Investigation; Procedural History	1
	B. The Parties; Assignment of Patents	2
	C. The Accused Products	3
	D. Technological Background	5
II.	Jurisdiction	7
III.	Importation	9
IV.	General Principles of Applicable Law	9
	A. Claim Construction	9
	B. Infringement	13
	C. Validity	17
	D. Domestic Industry	22
V.	United States Patent No. 6,069,896	25
	A. Claim Construction	27
	B. Infringement	48

PUBLIC VERSION

C.	Validity	68
D.	Domestic Industry (Technical Prong)	81
VI.	United States Patent No. 7,162,094	90
A.	Claim Construction	95
B.	Infringement	115
C.	Validity	131
D.	Domestic Industry (Technical Prong)	145
VII.	United States Patent No. 6,980,596	153
A.	Claim Construction	154
B.	Infringement	171
C.	Validity	188
D.	Domestic Industry (Technical Prong)	193
VIII.	United States Patent No. 5,357,571	200
A.	Claim Construction	201
B.	Infringement	214
C.	Validity	224
D.	Domestic Industry (Technical Prong)	239

PUBLIC VERSION

IX.	United States Patent No. 5,319,712	242
A.	Claim Construction	244
B.	Infringement	269
C.	Validity	275
D.	Domestic Industry (Technical Prong)	278
X.	Equitable Defenses – RAND	282
XI.	Economic Prong; Determinations on Domestic Industry	306
XII.	Conclusions of Law	330
XIII.	Initial Determination and Order	331

PUBLIC VERSION

The following abbreviations may be used in this Initial Determination:

ALJ	-	Administrative Law Judge
CDX	-	Complainants' Demonstrative Exhibit
CPX	-	Complainants' Physical Exhibit
CX	-	Complainants' Exhibit
Dep.	-	Deposition
EDIS	-	Electronic Document Imaging System
JPX	-	Joint Physical Exhibit
JX	-	Joint Exhibit
RDX	-	Respondent's Demonstrative Exhibit
RPX	-	Respondent's Physical Exhibit
RWS	-	Rebuttal Witness Statement
RX	-	Respondent's Exhibit
Tr.	-	Transcript
WS	-	Witness Statement

PUBLIC VERSION

I. Background

A. Institution of the Investigation; Procedural History

By publication of a notice in the *Federal Register* on May 21, 2010, pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, the Commission instituted this investigation to determine:

[W]hether whether there is a violation of subsection (a)(1)(B) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain gaming and entertainment consoles, related software, and components thereof that infringe one or more of claims 6, 8-10, and 17 of the '712 patent [(U.S. Patent No. 5,319,712)]; claims 9-18 of the '571 patent [(U.S. Patent No. 5,357,571)]; claims 1-3 and 12 of the '896 patent [(U.S. Patent No. 6,069,896)]; claims 1-3, 7, and 8 of the '596 patent [(U.S. Patent No. 6,980,596)]; and claims 5-8 and 10 of the '094 patent [(and U.S. Patent No. 7,162,094)], and whether an industry in the United States exists as required by subsection (a)(2) of section 337.

75 Fed. Reg. 80843 (2010).

The complainants are: Motorola Mobility, Inc. of Libertyville, Illinois ("Motorola Mobility"); and General Instrument Corporation of Horsham, Pennsylvania ("General Instrument") (collectively, Motorola Mobility and General Instrument are referred to as "Motorola" or "complainants"). The Commission named as the respondent: Microsoft Corporation of Redmond, Washington ("Microsoft" or "respondent").¹ *Id.*

Initially, the target date for completion of this investigation was set at 17 months, *i.e.*, May 23, 2012. Order No. 5 (initial determination setting target date); Comm'n

¹ Although the Commission named the Office of Unfair Import Investigations ("OUII") as a party in the investigation, OUII withdrew from participation in accordance with the Commission's Strategic Human Capital Plan. See 75 Fed. Reg. 80843 (2010); Letter from OUII to the Administrative Law Judge (Mar. 3, 2011).

PUBLIC VERSION

Notice Not to Review (Feb. 10, 2011). Subsequent to revised procedural schedules, and reassignment of the investigation to the undersigned (the third administrative law judge to preside over the investigation), pursuant to 19 C.F.R. §§ 210.51(a) and 210.42(a)(1)(i), the target date was extended by three months, *i.e.*, to August 23, 2012, and thus the due date for the Initial Determination on violation is April 23, 2012. Order No. 19 (initial determination setting target date); Notice of Comm'n Not to Review (Nov. 21, 2011).

Two two-hour tutorial sessions were held in this investigation, the first on December 13, and the second on December 21, 2011. *See* Order No. 23. The first session concerned the '596 patent and the '094 patent. Tutorial Tr. 7.² The second session concerned the '571 patent, the '712 patent and the '896 patent. Tutorial Tr. 108.

A prehearing conference was held on January 9, 2012, with the evidentiary hearing in this investigation commencing immediately thereafter. The hearing concluded on January 20, 2012. *See* Order Nos. 21 and 26; Tr. 1-2724. The parties were requested to file post-hearing briefs not to exceed 300 pages in length, and to file reply briefs not to exceed 100 pages in length. Tr. 17-20, 372, 2422.

B. The Parties; Assignment of Patents

Motorola Mobility is a corporation organized under the laws of the State of Delaware, having a principal place of business in Libertyville, Illinois. General Instrument is a corporation organized under the laws of the State of Delaware, having a principal place of business in Horsham, Pennsylvania. Motorola Mobility and General

² The two tutorial sessions were paginated continuously. Thus, the transcript for the first session covers pages 1 through 101; and the transcript for the second session covers pages 102 through 200.

PUBLIC VERSION

Instrument are subsidiaries of Motorola Mobility Holdings, Inc. CX-715C (Dailey WS) at 3-4; CX-11 at 1, 4, 10; Compls. Br. at 4.

Microsoft is a corporation organized under the laws of the State of Washington, having its principal place of business in Redmond, Washington. Resp. to Complaint at 5, ¶ 18; Compls. Br. at 4.

The ‘896 patent, the ‘571 patent and the ‘721 patent are assigned to Motorola Mobility. CX-1; CX-2; CX-4; CX-5. Both the ‘596 patent and the ‘094 patent are assigned to General Instrument. CX-6; CX-7.

C. The Accused Products

The accused products in this investigation are Microsoft Xbox 360 consoles and accessories. The accused products are listed in a joint filing that was required by Ground Rule 12 (requiring “a comprehensive joint outline of the issues to be decided in the final Initial Determination on violation”).³ By listing a product in the joint filing, Microsoft has not admitted infringement. Nevertheless, the joint filing indicates the final extent of Motorola’s accusations in this investigation. *See Parties’ Joint Submission Pursuant to GR12 (EDIS Doc. No. 471326) (“Ground Rule 12 Filing”).*

With respect to the ‘896 patent, Motorola asserts claims 1 and 12, and accuses all versions and configurations of the Microsoft Xbox 360 console imported into the United

³ Ground Rule 12 provides: “On the same day the initial post-hearing briefs are due, the parties shall file a comprehensive joint outline of the issues to be decided in the final Initial Determination on violation. Moreover, the claim terms briefed by the parties must be identical. The construction of any part of a disputed claim term that is not briefed is waived.” Ground Rule 12 (attached to Order No. 20 (Issuing New Ground Rules)); *see* Tr. 2420-2423 (concerning Ground Rule 12).

PUBLIC VERSION

States and/or sold after importation into the United States on or after December 17, 2010, and all wireless accessories.⁴ *Id.* at 4.

With respect to the ‘094 patent, Motorola asserts claims 7, 8 and 10, and accuses all versions and configurations of the Microsoft Xbox 360 console imported into the United States and/or sold after importation into the United States on or after December 17, 2010. *Id.* at 5.

With respect to the ‘596 patent, Motorola asserts claims 1 and 2, and accuses all versions and configurations of the Microsoft Xbox 360 console imported into the United States and/or sold after importation into the United States on or after December 17, 2010. *Id.* at 6.

With respect to the ‘571 patent, Motorola asserts claims 12 and 13, and accuses all versions and configurations of the Microsoft Xbox 360 console imported into the

⁴ As stated in the joint filing, Motorola accuses:

All versions and configurations of the Microsoft Xbox 360 console imported into the United States and/or sold after importation into the United States on or after December 17, 2010, including but not limited to the Xbox 360 4 GB Console and the Xbox 360 250 GB Console[., sic]; as well as all wireless accessories, including but not limited to the Xbox 360 Wireless Controller, Xbox 360 Wireless Controller Play and Charge Kit, Wireless Controller with Transforming D-Pad and Play and Charge Kit, Xbox 360 Halo: Reach Wireless Controller, Fable III Limited Edition Wireless Controller, Xbox 360 Wireless Headset, Xbox 360 Halo: Reach Wireless Headset, Xbox 360 Wireless Speed Wheel, Xbox 360 Wireless Microphone, and Xbox 360 ChatPad.

Ground Rule 12 Filing at 4. Although Motorola refers to two specific consoles (*i.e.*, “the Xbox 360 4 GB Console and the Xbox 360 250 GB Console”), Motorola’s use of the phrase “including but not limited to” indicates that those two consoles may be examples of accused consoles. Motorola uses similar language with reference to examples of “all wireless accessories.” In fact, Motorola has used similar “including but not limited” phrasing with respect to its accusations under each of the asserted patents. *See Id.* at 4-8. Whether Motorola has shown infringement by any specific version or configuration of accused consoles or accessories is addressed in connection with the infringement issue.

PUBLIC VERSION

United States and/or sold after importation into the United States on or after December 17, 2010. The parties dispute whether Xbox consoles and wireless adapters using WiFi chips made by Atheros have been properly accused in this investigation. *Id.* at 7 & n.2. That issue is decided below in connection with the infringement issue.

With respect to the '712 patent, Motorola asserts claims 6, 8 and 17, and accuses all versions and configurations of the Microsoft Xbox 360 console imported into the United States and/or sold after importation into the United States on or after December 17, 2010. The parties dispute whether Xbox consoles and wireless adapters using WiFi chips made by Atheros have been properly accused in this investigation. *Id.* at 8 & n.3. That issue is decided below in connection with the infringement issue.

D. Technological Background

An Xbox 360 console typically uses a customer's television to display games, videos or other entertainment; uses a customer's home router to reach the Internet; and may be controlled by a user through wired or wireless controllers or other accessories. Tutorial Tr. 96-97, 195-198. The patents asserted by Motorola in this investigation relate to several aspects of video technology and wireless communications.

The '094 and '596 patents relate to certain video coding techniques used in a video coding standard called H.264. The H.264 standard was published in 2003, is also known as MPEG-4 Part 10, and also as MPEG advanced video coding or AVC. MPEG is an acronym for the Motion Picture Experts Group. That group joined with another group called the Video Coding Experts Group (or VCEG) to form the Joint Video Team (or JVT). The JVT developed H.264 video standard. Tutorial Tr. 8-9.

PUBLIC VERSION

One goal of the H.264 (or MPEG-4 Part 10) standard was to enhance video compression efficiency over the previous standard called MPEG-2. Indeed, the H.264 standard allows one to achieve the same image quality while using fewer bits of information. Tutorial Tr. 9. This is done through a technique of encoding video data to eliminate temporal and spatial redundancies, thereby enabling one to store and transmit the data using a smaller bandwidth. The technique allows one to decompress the encoded data in order to decompress the video and to reconstruct an image in a way that is most faithful to the original image. The latter step is accomplished by generating approximated data that can be substituted for the nonessential data removed during the encoding process. Tutorial Tr. 9-11.

Video images are captured and displayed in lines. Video is available in two forms: progressive and interlaced. In progressive video, an image is captured or displayed line-by-line, in order, one after the other. In interlaced video, the odd lines are captured first; then, only a fraction of a second later, the even lines are captured. Thus, in encoding or decoding interlaced video, one must account for the short lapse of time in processing the odd and even lines that make up a video image. Tutorial Tr. 32-37, 50-57.

The '571 and '712 patents both involve wireless communications and the encryption of wireless communications. Encryption is used to prevent unauthorized reception of communications. Tutorial Tr. 164-165. The parties have referred to the '571 and '712 patents as the 802.11 patents. Tutorial Tr. 108, 140, 152.

The 802.11 standard is an international standard published by the IEEE (Institute of Electrical and Electronics Engineers), and concerns communications with a router.

PUBLIC VERSION

The standard is used to implement wireless networks, including WiFi networks. The 802.11 standard provides options for network encryption. Tutorial Tr. 118, 152-156, 165.

Work began on the 802.11 standard many years ago, and has been subject to revision. The printed standard is now lengthy with over one thousand pages, with many optional portions, and reflects the contributions of many organizations. Tutorial Tr. 152.

The ‘896 patent involves technology used to be sure that devices make only authorized wireless connections. Tutorial Tr. 175, 183, 192-193. This area of technology generally involves making sure that devices connect to other devices that the user has selected or that meet a specific need. For example, a cell phone or a PDA may need to connect to a specific printer. This area of technology also involves making sure that communications are not received by similar devices used by a neighbor (such as making sure that your MP3 player does not play music in your neighbor’s car). Tutorial Tr. 168-176, 192.

II. Jurisdiction

All parties have appeared and presented evidence and arguments on the merits in this investigation. No party has contested the Commission’s jurisdiction over it. *See, e.g.*, Ground Rule 12 Filing. Accordingly, it is found that the Commission has personal jurisdiction over all parties in this investigation.

No party has contested the Commission’s *in rem* jurisdiction over the accused products. *See, e.g., Id.* Indeed, as indicated below, the importation requirement has been satisfied with respect to the accused products. Accordingly, it is found that the Commission has *in rem* jurisdiction over the accused products.

PUBLIC VERSION

No party has contested the Commission's jurisdiction over the subject matter of this investigation. *See, e.g., Id.* Indeed, as indicated in the Commission's notice of investigation, discussed above, this investigation involves the importation of products alleged to infringe United States patents in a manner that violates section 337 of the Tariff Act, as amended. Based on those facts alone, it should be found that the Commission has subject matter jurisdiction over this investigation.

Additionally, it is noted that early in Microsoft's initial post-hearing, respondent states: "Microsoft does not contest the Commission's jurisdiction, except to the extent set forth below concerning MMI's assertion of patents for which it has committed to provide licenses on RAND terms and conditions." Resp. Br. at 3 (Jurisdiction). Yet, Microsoft does not further address such a jurisdictional issue in its briefing. Indeed, nowhere in Microsoft's initial post-hearing brief (or reply brief) does respondent show that a failure of Motorola to fulfill licensing commitments, or otherwise to prevail in its infringement case, would deprive the Commission of subject matter jurisdiction, or any other form of jurisdiction, necessary to conclude this investigation.⁵

⁵ See *Amgen v. Int'l Trade Comm'n*, 902 F.2d 1532 (Fed. Cir. 1999) ("As is very common in situations where a tribunal's subject matter jurisdiction is based on the same statute which gives rise to the federal right, the jurisdictional requirements of section 1337 mesh with the factual requirements necessary to prevail on the merits. In such a situation, the Supreme Court has held that the tribunal should assume jurisdiction and treat (and dismiss on, if necessary) the merits of the case." *Id.* at 1536 (footnote omitted) (citing *Bell v. Hood*, 327 U.S. 678, 682 (1946); *Jackson Transit Authority v. Local Division 1285, Amalgamated Transit Union, AFL-CIO-CLC*, 457 U.S. 15, 21 (1982))).

PUBLIC VERSION

Accordingly, it is found that along with personal jurisdiction over the parties and *in rem* jurisdiction over the accused products, the Commission also has subject matter jurisdiction over this investigation.

III. Importation

Review of Microsoft's initial post-hearing and reply briefs, as well as the Ground Rule 12 Filing, shows that respondent has not contested the issue of importation.

In addition, the parties have stipulated that, for the purposes of this investigation, the importation requirement of section 337 (19 U.S.C. § 1337(a)(1)(B)) has been satisfied with respect to the 250 GB Xbox 360 S and the 4 GB Xbox 360 S. CX-628C.

Consequently, it is found that the importation requirement is satisfied with respect to all accused products.

IV. General Principles of Patent Law**A. Claim Construction**

Claim construction begins with the plain language of the claim.⁶ Claims should be given their ordinary and customary meaning as understood by a person of ordinary skill in the art, viewing the claim terms in the context of the entire patent. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006).⁷

⁶ Only those claim terms that are in controversy need to be construed, and only to the extent necessary to resolve the controversy. *Vanderlande Indus. Nederland BV v. Int'l Trade Comm.*, 366 F.3d 1311, 1323 (Fed. Cir. 2004); *Vivid Tech., Inc. v. American Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

⁷ Factors that may be considered when determining the level of ordinary skill in the art include: "(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are

PUBLIC VERSION

In some instances, claim terms do not have particular meaning in a field of art, and claim construction involves little more than the application of the widely accepted meaning of commonly understood words. *Phillips*, 415 F.3d at 1314. “In such circumstances, general purpose dictionaries may be helpful.” *Id.*

In many cases, claim terms have a specialized meaning and it is necessary to determine what a person of skill in the art would have understood the disputed claim language to mean. “Because the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to ‘those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean.’” *Id.* (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)). The public sources identified by in *Phillips* include “the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Id.*

In cases in which the meaning of a claim term is uncertain, the specification usually is the best guide to the meaning of the term. *Id.* at 1315. As a general rule, the particular examples or embodiments discussed in the specification are not to be read into the claims as limitations. *Markman*, 52 F.3d at 979. However, the specification is always highly relevant to the claim construction analysis, and is usually dispositive. *Id.* Moreover, “[t]he construction that stays true to the claim language and most naturally

made; (5) sophistication of the technology; and (6) educational level of active workers in the field.” *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 696 (Fed. Cir. 1983), cert. denied, 464 U.S. 1043 (1984).

PUBLIC VERSION

aligns with the patent's description of the invention will be, in the end, the correct construction." *Id.* at 1316.

Claims are not necessarily, and are not usually, limited in scope to the preferred embodiment. *RF Delaware, Inc. v. Pacific Keystone Techs., Inc.*, 326 F.3d 1255, 1263 (Fed. Cir. 2003); *Decisioning.com, Inc. v. Federated Dep't Stores, Inc.*, 527 F.3d 1300, 1314 (Fed. Cir. 2008) ("[The] description of a preferred embodiment, in the absence of a clear intention to limit claim scope, is an insufficient basis on which to narrow the claims."). Nevertheless, claim constructions that exclude the preferred embodiment are "rarely, if ever, correct and require highly persuasive evidentiary support." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996). Such a conclusion can be mandated in rare instances by clear intrinsic evidence, such as unambiguous claim language or a clear disclaimer by the patentees during patent prosecution. *Elektro Instrument v. O.U.R. Sci. Int'l*, 214 F.3d 1302, 1308 (Fed. Cir. 2000); *Rheox, Inc. v. Entact, Inc.*, 276 F.3d 1319 (Fed. Cir. 2002).

If the intrinsic evidence does not establish the meaning of a claim, then extrinsic evidence may be considered. Extrinsic evidence consists of all evidence external to the patent and the prosecution history, and includes inventor testimony, expert testimony, and learned treatises. *Phillips*, 415 F.3d at 1317. Inventor testimony can be useful to shed light on the relevant art. In evaluating expert testimony, a court should discount any expert testimony that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent. *Id.* at 1318. Extrinsic evidence may be considered

PUBLIC VERSION

if a court deems it helpful in determining the true meaning of language used in the patent claims. *Id.*

This investigation involves means-plus-function claim limitations. When a claim uses the term “means” to describe a limitation, a presumption arises that the inventor used the term to invoke the means-plus-function format authorized by 35 U.S.C. § 112, ¶ 6.⁸ *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). “This presumption can be rebutted when the claim, in addition to the functional language, recites structure sufficient to perform the claimed function in its entirety.” *Id.*

Once a court concludes that a claim limitation is a means-plus-function limitation, two steps of claim construction remain: (1) the court must first identify the function of the limitation; and (2) the court must then look to the specification and identify the corresponding structure for that function. *Biomedino LLC v. Waters Technologies Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007). If there is no structure in the specification corresponding to the means-plus-function limitation, the claim will be found invalid as indefinite. *Id.*

While the specification must contain structure linked to claimed means, “[a]ll one needs to do in order to obtain the benefit of [§ 112, ¶ 6] is to recite some structure corresponding to the means in the specification, as the statute states, so that one can readily ascertain what the claim means and comply with the particularity requirement of

⁸ The relevant portion of section 112 provides:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112, ¶ 6.

PUBLIC VERSION

[§ 112,] ¶ 2.” *Id.* (citing *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1382 (Fed. Cir. 1999)). Additionally, interpretation of what is disclosed in the specification must be made in light of the knowledge of one skilled in the art. *Id.* at 1380.

Thus, under section 112, the corresponding structure of the limitation “must be disclosed in the written description in such a manner that one skilled in the art will know and understand what structure corresponds to the means limitation. Otherwise, one does not know what the claim means.” *Id.* at 1382. Yet, “the testimony of one of ordinary skill in the art cannot supplant the total absence of structure from the specification.” *Id.* (quoting *Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1302 (Fed. Cir. 2005)).

“A means-plus-function claim encompasses all structure in the specification corresponding to that element and equivalent structures.” The statute does not, however, permit limitation of a means-plus-function claim by adopting a function different from that explicitly recited in the claim. Nor does the statute permit incorporation of structure from the written description beyond that necessary to perform the claimed function.

Micro Chem. Inc. v. Great Plains Chem. Co., Inc., 194 F.3d 1250, 1258 (Fed. Cir. 1999).

B. Infringement

1. Direct Infringement

Under 35 U.S.C. §271(a), direct infringement consists of making, using, offering to sell, or selling a patented invention without consent of the patent owner. The complainant in a section 337 investigation bears the burden of proving infringement of the asserted patent claims by a “preponderance of the evidence.” *Certain Flooring Products, Inv. No. 337-TA-443, Comm’n Notice of Final Determination of No Violation*

PUBLIC VERSION

of Section 337, 2002 WL 448690 at *59, (Mar. 22, 2002); *Enercon GmbH v. Int'l Trade Comm'n*, 151 F.3d 1376 (Fed. Cir. 1998).

Literal infringement of a claim occurs when every limitation recited in the claim appears in the accused device, i.e., when the properly construed claim reads on the accused device exactly.⁹ *Amhil Enters., Ltd. v. Wawa, Inc.*, 81 F.3d 1554, 1562 (Fed. Cir. 1996); *Southwall Tech. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed Cir. 1995).

If the accused product does not literally infringe the patent claim, infringement might be found under the doctrine of equivalents. “Under this doctrine, a product or process that does not literally infringe upon the express terms of a patent claim may nonetheless be found to infringe if there is ‘equivalence’ between the elements of the accused product or process and the claimed elements of the patented invention.”

Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co., 520 U.S. 17, 21 (1997) (citing *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 609 (1950)). “The determination of equivalence should be applied as an objective inquiry on an element-by-element basis.”¹⁰ *Id.* at 40.

“An element in the accused product is equivalent to a claim limitation if the differences between the two are insubstantial. The analysis focuses on whether the element in the accused device ‘performs substantially the same function in substantially

⁹ Each patent claim element or limitation is considered material and essential. *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1538 (Fed. Cir. 1991). If an accused device lacks a limitation of an independent claim, the device cannot infringe a dependent claim. See *Wahpeton Canvas Co. v. Frontier, Inc.*, 870 F.2d 1546, 1552 n.9 (Fed. Cir. 1989).

¹⁰ “Infringement, whether literal or under the doctrine of equivalents, is a question of fact.” *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1130 (Fed. Cir. 2011).

PUBLIC VERSION

the same way to obtain the same result' as the claim limitation." *AquaTex Indus. v. Techniche Solutions*, 419 F.3d 1374, 1382 (Fed. Cir. 2005) (quoting *Graver Tank*, 339 U.S. at 608); *accord Absolute Software*, 659 F.3d at 1139-40.¹¹

Prosecution history estoppel can prevent a patentee from relying on the doctrine of equivalents when the patentee relinquishes subject matter during the prosecution of the patent, either by amendment or argument. *AquaTex*, 419 F.3d at 1382. In particular, "[t]he doctrine of prosecution history estoppel limits the doctrine of equivalents when an applicant makes a narrowing amendment for purposes of patentability, or clearly and unmistakably surrenders subject matter by arguments made to an examiner." *Id.* (quoting *Salazar v. Procter & Gamble Co.*, 414 F.3d 1342, 1344 (Fed. Cir. 2005)).

2. Indirect Infringement

a. Induced Infringement

Section 271(b) of the Patent Act provides: "Whoever actively induces infringement of a patent shall be liable as an infringer." 35 U.S.C. § 271(b). "To prevail on a claim of induced infringement, in addition to inducement by the defendant, the patentee must also show that the asserted patent was directly infringed." *Epcon Gas Sys. v. Bauer Compressors, Inc.*, 279 F.3d 1022, 1033 (Fed. Cir. 2002). Further, "[s]ection 271(b) covers active inducement of infringement, which typically includes acts that intentionally cause, urge, encourage, or aid another to directly infringe

¹¹ "The known interchangeability of substitutes for an element of a patent is one of the express objective factors noted by *Graver Tank* as bearing upon whether the accused device is substantially the same as the patented invention. Independent experimentation by the alleged infringer would not always reflect upon the objective question whether a person skilled in the art would have known of the interchangeability between two elements, but in many cases it would likely be probative of such knowledge." *Warner-Jenkinson*, 520 U.S. at 36.

PUBLIC VERSION

a patent.” *Arris Group v. British Telecomm. PLC*, 639 F.3d 1368, 1379 n.13 (Fed. Cir. 2011). The Supreme Court recently held that “induced infringement under § 271(b) requires knowledge that the induced acts constitute patent infringement.” *Global-Tech Appliances, Inc. v. SEB S.A.*, -- U.S. --, 131 S.Ct. 2060, 2068 (May 31, 2011). The Court further held: “[g]iven the long history of willful blindness^[12] and its wide acceptance in the Federal Judiciary, we can see no reason why the doctrine should not apply in civil lawsuits for induced patent infringement under 35 U.S.C. § 271(b).” 131 S.Ct. at 2060 (footnote omitted).

b. Contributory Infringement

Section 271(c) of the Patent Act provides: “Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer. 35 U.S.C. § 271(c).

Section 271(c) “covers both contributory infringement of system claims and method claims.”¹³ *Arris*, 639 F.3d at 1376 (footnotes omitted). To hold a component

¹² “While the Courts of Appeals articulate the doctrine of willful blindness in slightly different ways, all appear to agree on two basic requirements: (1) the defendant must subjectively believe that there is a high probability that a fact exists and (2) the defendant must take deliberate actions to avoid learning of that fact. We think these requirements give willful blindness an appropriately limited scope that surpasses recklessness and negligence.” *Global-Tech*, 131 S.Ct. 2070-71.

¹³ “Claims which recite a ‘system,’ ‘apparatus,’ ‘combination,’ or the like are all analytically similar in the sense that their claim limitations include elements rather than

PUBLIC VERSION

supplier liable for contributory infringement, a patent holder must show, *inter alia*, that (a) the supplier's product was used to commit acts of direct infringement; (b) the product's use constituted a material part of the invention; (c) the supplier knew its product was especially made or especially adapted for use in an infringement" of the patent; and (d) the product is not a staple article or commodity of commerce suitable for substantial noninfringing use. *Id.*

C. Validity

One cannot be held liable for practicing an invalid patent claim. *See Pandrol USA, LP v. AirBoss Railway Prods., Inc.*, 320 F.3d 1354, 1365 (Fed. Cir. 2003). Nevertheless, each claim of a patent is presumed to be valid, even if it depends from a claim found to be invalid. 35 U.S.C. § 282; *DMI Inc. v. Deere & Co.*, 802 F.2d 421 (Fed. Cir. 1986). A respondent that has raised patent invalidity as an affirmative defense must overcome the presumption by "clear and convincing" evidence of invalidity. *Checkpoint Systems, Inc. v. United States Int'l Trade Comm'n*, 54 F.3d 756, 761 (Fed. Cir. 1995).

In this investigation, respondent raises affirmative defenses based on the following alleged ground of patent claim invalidity: anticipation, obviousness, indefiniteness, and lack of a written description. *See* Ground Rule 12 Filing at 5-9.

1. Anticipation

Anticipation under 35 U.S.C. § 102 is a question of fact. *z4 Techs., Inc. v. Microsoft Corp.*, 507 F.3d 1340, 1347 (Fed. Cir. 2007). Section 102 provides that, depending on the circumstances, a claimed invention may be anticipated by variety of

method steps. All such claims can be contributorily infringed by a component supplier." *Arris*, 639 F.3d at 1376 n.8.

PUBLIC VERSION

prior art, including publications, earlier-sold products, and patents. *See* 35 U.S.C. § 102 (e.g., section 102(b) provides that one is not entitled to a patent if the claimed invention “was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States”).

The general law of anticipation may be summarized, as follows:

A reference is anticipatory under § 102(b) when it satisfies particular requirements. First, the reference must disclose each and every element of the claimed invention, whether it does so explicitly or inherently. *Eli Lilly & Co. v. Zenith Goldline Pharms., Inc.*, 471 F.3d 1369, 1375 (Fed.Cir.2006). While those elements must be “arranged or combined in the same way as in the claim,” *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1370 (Fed.Cir.2008), the reference need not satisfy an *ipsissimis verbis* test, *In re Bond*, 910 F.2d 831, 832-33 (Fed.Cir.1990). Second, the reference must “enable one of ordinary skill in the art to make the invention without undue experimentation.” *Impax Labs., Inc. v. Aventis Pharms. Inc.*, 545 F.3d 1312, 1314 (Fed.Cir.2008); *see In re LeGrice*, 49 C.C.P.A. 1124, 301 F.2d 929, 940-44 (1962). As long as the reference discloses all of the claim limitations and enables the “subject matter that falls within the scope of the claims at issue,” the reference anticipates -- no “actual creation or reduction to practice” is required. *Schering Corp. v. Geneva Pharms., Inc.*, 339 F.3d 1373, 1380-81 (Fed.Cir.2003); *see In re Donohue*, 766 F.2d 531, 533 (Fed.Cir.1985). This is so despite the fact that the description provided in the anticipating reference might not otherwise entitle its author to a patent. *See Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1562 (Fed.Cir.1991) (discussing the “distinction between a written description adequate to support a claim under § 112 and a written description sufficient to anticipate its subject matter under § 102(b)”).

In re Gleave, 560 F.3d 1331, 1334 (Fed. Cir. 2009).

2. Obviousness

Under 35 U.S.C. § 103, a patent claim is invalid “if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having

PUBLIC VERSION

ordinary skill in the art.”¹⁴ While the ultimate determination of whether an invention would have been obvious is a legal conclusion, it is based on “underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness.” *Eli Lilly and Co. v. Teva Pharmaceuticals USA, Inc.*, 619 F.3d 1329 (Fed. Cir. 2010).

The objective evidence, also known as “secondary considerations,” include commercial success, long felt need, and failure of others . *Graham v. John Deere Co.*, 383 U.S. 1, 13-17 (1966); *Dystar Textilfarben GmbH v. C.H. Patrick Co.*, 464 F.3d 1356, 1361 (Fed. Cir. 2006). “[E]vidence arising out of the so-called ‘secondary considerations’ must always when present be considered en route to a determination of obviousness.” *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538 (Fed. Cir. 1983). Secondary considerations, such as commercial success, will not always dislodge a determination of obviousness based on analysis of the prior art. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 426 (2007) (commercial success did not alter conclusion of obviousness).

“One of the ways in which a patent’s subject matter can be proved obvious is by noting that there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent’s claims.” *KSR*, 550 U.S. at 419-20. “[A]ny need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *Id.*

¹⁴ The standard for determining whether a patent or publication is prior art under section 103 is the same as under 35 U.S.C. § 102, which is a legal question. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1568 (Fed. Cir. 1987).

PUBLIC VERSION

Specific teachings, suggestions, or motivations to combine prior art may provide helpful insights into the state of the art at the time of the alleged invention. *Id.* at 420. Nevertheless, “an obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents. The diversity of inventive pursuits and of modern technology counsels against limiting the analysis in this way.” *Id.* “Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *Id.* A “person of ordinary skill is also a person of ordinary creativity.” *Id.* at 421.

Nevertheless, “the burden falls on the patent challenger to show by clear and convincing evidence that a person of ordinary skill in the art would have had reason to attempt to make the composition or device, or carry out the claimed process, and would have had a reasonable expectation of success in doing so.” *PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1360 (Fed. Cir. 2007); see *KSR*, 550 U.S. at 416 (a combination of elements must do more than yield a predictable result; combining elements that work together in an unexpected and fruitful manner would not have been obvious).¹⁵

3. Indefiniteness

The definiteness requirement of 35 U.S.C. § 112 ensures that the patent claims particularly point out and distinctly claim the subject matter that the patentee regards to

¹⁵ Further, “when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.” *KSR*, 550 U.S. at 416 (citing *United States v. Adams*, 383 U.S. 39, 52 (1966)).

PUBLIC VERSION

be the invention. See 35 U.S.C. § 112, ¶ 2; *Metabolite Labs., Inc. v. Laboratory Corp. of America Holdings*, 370 F.3d 1354, 1366 (Fed. Cir. 2004). If a claim's legal scope is not clear enough so that a person of ordinary skill in the art could determine whether or not a particular product infringes, the claim is indefinite, and is, therefore, invalid. *Geneva Pharm., Inc. v. GlaxoSmithKline PLC*, 349 F.3d 1373, 1384 (Fed. Cir. 2003).¹⁶

Thus, it has been found that:

When a proposed construction requires that an artisan make a separate infringement determination for every set of circumstances in which the composition may be used, and when such determinations are likely to result in differing outcomes (sometimes infringing and sometimes not), that construction is likely to be indefinite.

Halliburton Energy Servs. v. M-I LLC, 514 F.3d 1244, 1255 (Fed. Cir. 2008).

4. Lack of a Written Description

The issue of whether a patent is invalid for failure to meet the written description requirement of 35 U.S.C. § 112, ¶ 1 is a question of fact. *Bard Peripheral Vascular, Inc. v. W.L. Gore & Associates, Inc.*, 670 F.3d 1171, 1188 (Fed. Cir. 2012). A patent's written description must clearly allow persons of ordinary skill in the art to recognize that the inventor invented what is claimed. The test for sufficiency of written description is “whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.* (quoting *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc)).

¹⁶ Indefiniteness is a question of law. *IGT v. Bally Gaming In'l, Inc.*, 659 F.3d 1109 (Fed. Cir. 2011).

PUBLIC VERSION

D. Domestic Industry

A violation of section 337(a)(1)(B), (C), (D) or (E) can be found “only if an industry in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned, exists or is in the process of being established.” 19 U.S.C. § 1337(a)(2). Section 337(a) further provides:

(3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned—

- (A) significant investment in plant and equipment;
- (B) significant employment of labor or capital; or
- (C) substantial investment in its exploitation, including engineering, research and development.

19 U.S.C. § 1337(a)(3).

These statutory requirements consist of an economic prong (which requires certain activities) and a technical prong (which requires that these activities relate to the intellectual property being protected). *Certain Stringed Musical Instruments and Components Thereof*, Comm'n Op. at 8 (May 16, 2008) (“*Stringed Musical Instruments*”).

The Commission practice is usually to assess the facts relating to the economic prong at the time that the complaint was filed. See *Certain Coaxial Cable Connectors and Components Thereof and Products Containing Same*, Inv. No. 337-TA-560, Comm'n Op. at 39 n.17 (Apr. 14, 2010) (“We note that only activities that occurred before the filing of a complaint with the Commission are relevant to whether a domestic industry exists or is in the process of being established under sections 337(a)(2)-(3).”) (citing

PUBLIC VERSION

Bally/Midway Mfg. Co. v. U.S. Int'l Trade Comm'n, 714 F.2d 1117, 1121 (Fed. Cir. 1983)). In some cases, however, the Commission will consider later developments in the alleged industry, such as “when a significant and unusual development occurred after the complaint has been filed.” *See Certain Video Game Systems and Controllers*, Inv. No. 337-TA-743, Comm’n Op., at 5-6 (Jan. 20, 2012) (“[I]n appropriate situations based on the specific facts and circumstances of an investigation, the Commission may consider activities and investments beyond the filing of the complaint.”).

The burden is on the complainant to show by a preponderance of the evidence that the domestic industry requirement is satisfied. *Certain Multimedia Display and Navigation Devices and Systems, Components Thereof, and Products Containing Same*, Inv. No. 337-TA-694, Comm’n Op. at 3 (July 22, 2011) (“Navigation Devices”).

“With respect to section 337(a)(3)(A) and (B), the technical prong is the requirement that the investments in plant or equipment and employment in labor or capital are actually related to ‘articles protected by’ the intellectual property right which forms the basis of the complaint.” *Id.* “The test for satisfying the ‘technical prong’ of the industry requirement is essentially same as that for infringement, i.e., a comparison of domestic products to the asserted claims.” *Alloc, Inc. v. In’t Trade Comm’n*, 342 F.2d 1361, 1375 (Fed. Cir. 2003). Consequently, the sections of this Initial Determination that discuss the claim construction and technical infringement issues relative to each asserted patent (*i.e.*, sections V through IX) also contain analyses of products that complainant relies upon to satisfy the technical prong of section 337(a)(3)(A) and (B).

PUBLIC VERSION

“With respect to section 337(a)(3)(C), the technical prong is the requirement that the activities of engineering, research and development, and licensing are actually related to the asserted intellectual property right.” *Id.*

With respect to the economic prong, and whether or not section 337(a)(3)(A) or (B) is satisfied, the Commission has held that “whether a complainant has established that its investment and/or employment activities are significant with respect to the articles protected by the intellectual property right concerned is not evaluated according to any rigid mathematical formula.” *Certain Printing and Imaging Devices and Components Thereof, Inv. No. 337-TA-690*, Comm’n Op. at 27 (Feb. 17, 2011) (“*Printing and Imaging Devices*”) (citing *Certain Male Prophylactic Devices*, Inv. No. 337-TA-546, Comm’n Op. at 39 (Aug. 1, 2007)). Rather, the Commission examines “the facts in each investigation, the article of commerce, and the realities of the marketplace. *Id.* The determination takes into account the nature of the investment and/or employment activities the industry in question, and the complainant’s relative size. *Id.* (citing *Stringed Musical Instruments*, Comm. Op. at 26).¹⁷

With respect to section 337(a)(3)(C), whether an investment in domestic industry is “substantial” is a fact-dependent inquiry for which the complainant bears the burden of proof. *Stringed Musical Instruments*, Comm’n Op. at 8. There is no minimum monetary expenditure that a complainant must demonstrate to qualify as a domestic industry under the “substantial investment” requirement of this section. There is no need to define or

¹⁷ A further discussion of “significant investment” under section 337(a)(3)(A)-(B) is contained in section XI, in connection with the specific arguments made by Motorola in this investigation.

PUBLIC VERSION

quantify an industry in absolute mathematical terms. Rather, “the requirement for showing the existence of a domestic industry will depend on the industry in question, and the complainant’s relative size.” *Id.* at 14.¹⁸

V. U.S. Patent No. 6,069,896

U.S. Patent No. 6,069,896 (“the ‘896 patent”) is titled, “Capability Addressable Network and Method Therefor.” JX-5 (‘896 patent). The ‘896 patent issued on May 30, 2000, and the named inventors are Ronald Borgstahl, Jeffrey Harris, Ernest Woodward, and David Leeper. *Id.* The ‘896 patent relates generally to “data communication networks,” and more specifically relates to “a peer-to-peer network in which node addressing is dynamically configurable.” *Id.* at col. 1, lns. 5-8 (Technical Field of the Invention).

Motorola asserts independent method claims 1 and 12. The asserted claims read as follows:

1. In a capability addressable peer-to-peer data communication network, a method of establishing network connectivity comprising the steps of:

initiating a setup connection between first and second peers of said network by transmitting an unsolicited message containing an identification of said first peer to said second peer;

authorizing said second peer to establish said setup connection with said first peer based on said identification of said first peer;

exchanging needs and capabilities between said first and second peers after establishing said setup connection; and

¹⁸ A further discussion of “substantial investment” under section 337(a)(3)(C) is contained in section XI, in connection with the specific arguments made by Motorola in this investigation.

PUBLIC VERSION

selectively processing an addressed service connection in response to said exchange of needs and capabilities.

12. A method of operating a capability addressable peer-to-peer data communication network comprising the steps of:

- a) detecting, at a first one of a service-requesting peer and a service-providing peer, physical proximity of a second one of said service-requesting and service-providing peers;
- b) determining whether a need for a service connection exists at one of said service-requesting and service-providing peers;
- c) establishing, if said determining step identifies said need, a setup wireless connection between said service-requesting and service-providing peers;
- d) communicating authorization information describing said service-requesting peer to said service-providing peer;
- e) forming a wireless service connection between said service-requesting and service-providing peers when said service-requesting peer is authorized through an identification code;
- f) communicating capability information describing said service-providing peer to said service-requesting peer;
- g) forming said wireless service connection between said service-requesting and service-providing peers when said service-providing peer is determined to have a capability compatible with said need determined in step b); and
- h) providing said capability using said service connection.

JX-5 at col. 10, lns. 27-42; col. 11, ln. 46 – col. 12, ln. 13.

A. Claim Construction¹⁹

¹⁹ A person of ordinary skill in the art of the '896 patent as of the fall of 1996 was typically a person who had a bachelor's degree in electrical engineering or computer science and three years of experience in networking and consumer electronics, or an

PUBLIC VERSION**1. “peer-to-peer” / “peer” (Claims 1, 12)**

Below is a chart showing the parties’ proposed claim constructions.

Claim Term	Motorola’s Construction	Microsoft’s Construction
“peer-to-peer”	having at least common portions of communications protocol and/or capability and does not refer to equivalence of physical size, functional capability, data processing capacity or transmitter/receiver range or power	communication between peers
“peer”	a computer or microprocessor controlled electronic device in a peer-to-peer network	device having at least common portions of communications protocol and/or capability with another peer, that can establish a personal area network, and that can initiate a connection with other peers without servers being required to manage the connections

The claim term “peer-to-peer” appears in the preamble of independent claims 1 and 12. JX-5 at col. 10, lns. 27-42; col. 11, ln. 46 – col. 12, ln. 13.²⁰

Motorola construes the term to mean “having at least common portions of communications protocol and/or capability and does not refer to equivalence of physical size, functional capability, data processing capacity or transmitter/receiver range or power.” Compls. Br. at 17-18; RX-394 (Joint Identification of Claim Terms and Proposed Constructions) at 9. Microsoft construes the term to mean “communication between peers.” Resp. Br. at 110-11.

advanced degree and one to two years of experience in the field. See CX-712C (Madisetti WS) at 9-10.

²⁰ The term also appears in non-asserted independent claim 10. JX-5.

PUBLIC VERSION

As proposed by Motorola, the claim term “peer-to-peer” is construed to mean “having at least common portions of communications protocol and/or capability and does not refer to equivalence of physical size, functional capability, data processing capacity or transmitter/receiver range or power.”

The ‘896 patent provides an express definition of the term “peer-to-peer”:

As used herein, the term “peer-to-peer” is defined to mean having at least common portions of communications protocol and/or capability and does not refer to equivalence of physical size, functional capability, data processing capacity or transmitter/receiver range or power.

JX-5 at col. 3, lns. 8-12 (emphasis added); Madisetti Tr. 264-66. When, as here, the patentee chooses to be his own lexicographer and provides an explicit definition, that definition governs. *See Sinorgchem Co. Shandong v. U.S. Int'l Trade Comm'n*, 511 F.3d 1132, 1138 (Fed. Cir. 2007); *Phillips*, 415 F.3d at 1316 (“the specification may reveal a special definition given to a claim term [so] the inventor's lexicography governs.”). Because the language used by the applicants (“as used herein” and “is defined to mean” “clearly, deliberately, and precisely” defines the term “without ambiguity,” this definition governs. *Sinorgchem*, 511 F.3d at 1136, 1138.

The term “peer” appears in the first, second, and third steps of independent claim 1, and steps a) through g) of independent claim 12. JX-5 at col. 10, lns. 27-42; col. 11, ln. 46 – col. 12, ln. 13.²¹

Motorola construes the term to mean “a computer or microprocessor controlled electronic device in a peer-to-peer network.” Compls. Br. at 17-18. Microsoft construes the term to mean a “device having at least common portions of communications protocol

²¹ The term also appears in non-asserted claims. JX-5.

PUBLIC VERSION

and/or capability with another peer, that can establish a personal area network, and that can initiate a connection with other peers without servers being required to manage the connections.” Resp. Br. at 110-11.

As proposed by Motorola, the claim term “peer” is construed to mean “a computer or microprocessor controlled electronic device in a peer-to-peer network.”

The ‘896 patent explains that a “peer” can be “virtually any electronic device”:

While FIG. 1 shows only a few peers 20, virtually any computer or microprocessor controlled electronic device throughout the world may serve as a peer 20.

JX-5 at col. 3, lns. 3-5 (emphasis added). Such a broad definition of “peer” is further supported elsewhere in the specification. For example, the specification provides that “a wide variety of everyday, commonly encountered electronically controlled devices” can be peers. JX-5 at col. 5, lns. 23-25. Examples of peers in the ‘896 patent include “a personal digital assistant (PDA), television, radio, CD player, tape player, copier, facsimile machine, telephone, cellular telephone, cordless telephone, pager, watch, computer, point of sale (POS) terminal, automated teller, or other electronic device.” JX-5 at col. 5, lns. 25-30. The ‘896 patent further explains that a peer can be an input/output device, such as “keyboards, pointing devices, optical scanners, microphones, and other well known input devices” and “printers, monitors, speakers, and other well known output devices.” JX-5 at col. 5, lns. 42-50. *See also* Madisetti Tr. 186.

Microsoft’s proposed construction omits the second half of the specification’s express definition of “peer-to-peer,” in which the specification explains that the term peer-to-peer “does not refer to equivalence of physical size, functional capability, data processing capacity or transmitter/receiver range or power.” JX-5 at col. 3, lns. 9-12.

PUBLIC VERSION

Indeed, although Microsoft's expert, Mr. McNair, agrees that the '896 patent provides an express definition of "peer-to-peer," RRX-68C (McNair RWS) at 11-13, he nevertheless referred to the second half of the express definition as "not really necessary to me or useful."²² McNair Tr. 1110. But this approach is contrary to law. *Sinorgchem*, 511 F.3d at 1136-1139 (overturning construction where it left off part of definition explicitly provided in patentee's lexicography).

Microsoft proposes two unrelated requirements that are not part of the '896 patent's disclosure. First, Microsoft requires that a peer be a device "that can establish a personal area network." However, this is an optional characteristic: "Each peer or communication node 20 of communications network 22 may establish a personal area network." JX-5 at col. 3, lns. 12-14 (emphasis added); *see also* Madisetti Tr. 181-183; 187; 332-333; 336. Microsoft's expert, Mr. McNair, believes that this sentence limits the term "peer" in the claims. McNair Tr. 1110-1111. However, he concedes that "may establish" in the sentence in question is ambiguous and that it could mean "may or may not establish." McNair Tr. 1113. Although Mr. McNair goes on to claim that this ambiguity is resolved in the specification, the sentence he points to says, "In the preferred embodiments, each peer 20 can initiate a connection with other peers 20" JX-5 at col. 5, lns. 35-37; McNair Tr. 1113. However, the words "initiate" and "establish" are used differently in the claims and the specification. Further, this sentence describes only a preferred embodiment.

²² In his rebuttal witness statement, Mr. McNair took this position a step further, asserting that "peers" must be "interchangeable" and "act in the same manner when presented with the same inputs." RRX-68C (McNair RWS) at 11. This position is in direct conflict with the specification's express disclosure, JX-5 at col. 3, lns. 9-12.

PUBLIC VERSION

Second, Mr. McNair conflates the meanings of “establish” and “initiate.” RRX-68C (McNair RWS) at 23. As Dr. Madisetti pointed out, establishing a network requires only the ability to participate in the formation of that network. Madisetti Tr. 188-189.

Microsoft’s construction also requires a peer to be a device “that can initiate a connection with other peers without servers being required to manage the connections.” This characteristic, however, is a feature of only preferred, not all, embodiments. JX-5 at FIG. 1; col. 2, lns. 38-42; col. 3, lns. 35-37; col. 10, lns. 20-25; Madisetti Tr. 332-333. The Federal Circuit has repeatedly instructed that limiting the claims to a preferred embodiment is improper. *Phillips*, 415 F.3d at 1323.

2. “capability addressable peer-to-peer data communication network”

Claim Term	Motorola Construction	Microsoft Construction
“capability addressable peer-to-peer data communication network”	a peer-to-peer data communications network where messages may be addressed in some manner related to capability	a peer-to-peer data communications network that allows connection without any prior setup or activation procedures

The claim term “capability addressable peer-to-peer data communication network”²³ appears in the preamble of independent claims 1 and 12. JX-5 at col. 10, lns. 27-42; col. 11, ln. 46 – col. 12, ln. 13.²⁴

Motorola construes the term to mean “a peer-to-peer data communications network where messages may be addressed in some manner related to capability.” Compls. Br. at 19-20. Microsoft construes the term to mean “a peer-to-peer data

²³ The parties’ post-hearing briefs refer to “communication” as “communications.”

²⁴ The term also appears in non-asserted independent claim 10. JX-5.

PUBLIC VERSION

communications network that allows connection without any prior setup or activation procedures.” Resp. Br. at 116-17.

As proposed by Motorola, the claim term “capability addressable peer-to-peer data communication network” is construed to mean “a peer-to-peer data communications network where messages may be addressed in some manner related to capability.”

The parties’ constructions both require “a peer-to-peer data communications network” but differ in their characterization of a “capability addressable” network. Consistent with the plain language of the claim (*i.e.*, “capability addressable”), Motorola’s construction provides that the network is one in which “messages may be addressed in some manner related to capability.” Both parties’ experts agree with this construction. CX-712C (Madiasetti WS) at 14-16; McNair Tr. 1094.

The ‘896 patent provides that “[r]ather than specifying a network unique address to initiate a connection, network 22 uses physical proximity along with a needs and capabilities evaluation (discussed below) to target a peer 20 with which a connection is desired.” JX-5 at col. 4, lns. 18-22. Similarly, the Abstract of the ‘896 patent states that a “wireless, peer-to-peer, capability addressable network (22) is disclosed. The network (22) accommodates any number of peers (20). Network connections are formed based upon proximity between peers (20) and upon a needs and capabilities evaluation (82).”

In contrast, Microsoft’s proposed construction requires that the network “allows connection without any prior setup or activation procedures.” Microsoft’s own expert describes that characteristic as “a phrase that was used in the specification to describe desirable characteristics of the capability addressable network.” McNair Tr. 1092. Desirable features are not claim limitations. Whether connections can take place without

PUBLIC VERSION

“setup connection” / “setup wireless connection”	an initial connection over which two peers can negotiate an addressed service connection	an initial connection that permits two peers to exchange needs and capabilities to determine whether to create an “addressed service connection”
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The claim term “setup connection” appears in the first, second, and third steps of independent claim 1. JX-5 at col. 10, lns. 27-42.²⁵ The term “setup wireless connection” appears in step c) of independent claim 12. JX-5 at col. 11, ln. 46 – col. 12, ln. 13.

Motorola construes the terms to mean “an initial connection over which two peers can negotiate an addressed service connection.” Compls. Br. at 21. Microsoft construes the terms to mean “an initial connection that permits two peers to exchange needs and capabilities to determine whether to create an ‘addressed service connection’.” Resp. Br. at 122.

As proposed by Motorola, the claim term “setup wireless connection” is construed to mean “an initial connection over which two peers can negotiate an addressed service connection.” Additionally, the term “setup wireless connection” is construed to mean “an initial wireless connection over which two peers can negotiate an addressed service connection.”

The parties dispute whether a setup connection is a connection that allows peers to negotiate an addressed service connection (as Motorola proposes) or is somehow limited to a connection that permits two peers to exchange needs and capabilities to determine whether to create an addressed service connection (as Microsoft proposes).

The ‘896 patent discloses that a setup connection is used generally for the

²⁵ The term also appears in non-asserted claims. JX-5.

PUBLIC VERSION

prior activation or setup procedures has nothing to do with whether something is “capability addressable.” Prior activation and setup procedures relate to setting up the networks, whereas capability addressable relates to how messages will be addressed once a network has been set up.

Indeed, the inventors of the ‘896 patent recognized the importance of retaining some user control. Leeper Tr. 128-129. Microsoft’s proposed construction contradicts how the patent describes network set-up. While the ‘896 patent does state that “[a] priori activation and setup procedures are not required in this network because no network specific equipment requires network addresses in order to make connections” (JX-5 at col. 10, lns. 4-7; *see also id.* at col. 2, lns. 2-6), this statement does not preclude use of “a priori activation and setup procedures.” In fact, the ‘896 patent specifically contemplates that some prior setup procedures may take place: “Whether user intervention is required or not should depend upon the security.... For example, peers 20 involved in financial transactions can benefit upon user intervention to ensure security....” JX-5 at col. 8, lns. 46-55; *see also Id.* at col. 7, lns. 47-51. Similarly, in the “BACKGROUND OF THE INVENTION,” the ‘896 patent repeatedly describes the prior art as requiring “excessive” a priori activation and setup procedures. JX-5 at col. 1, lns. 53-54; col. 2, lns. 2-8, 29-31. This is consistent with the statement quoted immediately above, which makes clear that some user intervention and a priori knowledge is within the scope of the invention.

3. “setup connection” / “setup wireless connection”

Claim Term	Motorola Construction	Microsoft Construction
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PUBLIC VERSION

negotiation of an addressed service connection. Such use may include the evaluation of needs or capabilities. JX-5 at col. 7, ln. 55 – col. 8, ln. 6. A setup connection may also be used, however, for other negotiations:

If the negotiation process is not complete, a task 88 establishes or otherwise continues the setup connection in furtherance of the negotiation process by sending an addressed negotiation message (not shown) to the peer 20 whose peer ID 66 (see FIG. 7) was included in a just-received needs/capabilities message 64.

JX-5 at col. 8, lns. 23-30. Additional negotiations performed over the setup connection are further discussed in the following paragraph of the specification. JX-5 at col. 8, lns. 33-42.

Nonetheless, Microsoft requires the “setup connection” to permit peers to exchange needs and capabilities. However, only claim 1 requires an exchange of needs and capabilities. Claim 12 does not. Thus, Microsoft’s construction improperly reads a step from claim 1 into claim 12. Also, Microsoft improperly requires that a setup connection be used to make a binary decision—*whether* to create an addressed service connection.

4. “addressed service connection” (Claim 1) and “wireless service connection” (Claim 12)

Claim Term	Motorola Constructions	Microsoft Constructions
“addressed service connection” (Claim 1)	a connection over which service(s) can be provided to addressed peer(s)	connection created between two peers over which one peer provides the capability to satisfy another peer’s needs and where the peers are identified by address
“wireless service connection” (Claim 12)	a wireless connection over which services can be provided to peers	wireless connection created between two peers over which one peer provides the capability to satisfy another peer’s needs

PUBLIC VERSION

The claim term “addressed service connection” appears in the third step of independent claim 1. JX-5 at col. 10, lns. 27-42.²⁶

Motorola construes the term to mean “a connection over which service(s) can be provided to addressed peer(s).” Compls. Br. at 22. Microsoft construes the term to mean “connection created between two peers over which one peer provides the capability to satisfy another peer’s needs and where the peers are identified by address.” Resp. Br. at 120-21.

As proposed by Motorola, the claim term “addressed service connection” is construed to mean “a connection over which service(s) can be provided to addressed peer(s).”

The term “wireless service connection” appears in steps e) and g) of independent claim 12. JX-5 at col. 11, ln. 46 – col. 12, ln. 13.

Motorola construes the term to mean “a wireless connection over which services can be provided to peers.” Compls. Br. at 22. Microsoft construes the term to mean “wireless connection created between two peers over which one peer provides the capability to satisfy another peer’s needs.” Resp. Br. at 120-21.

The term “wireless service connection” is construed to mean “a wireless connection over which services can be provided to peers.”

The ‘896 patent discloses that, after some preliminary steps, “a process service connection procedure 92 is performed. During procedure 92, a one-to-one, addressed connection is established between peers 20 to perform network services.” JX-5 at col. 8,

²⁶ The term also appears in non-asserted claims. JX-5.

PUBLIC VERSION

lns. 40-44. FIG. 10 of the ‘896 patent shows various services that can be provided over an addressed service connection. For example, the addressed connection can provide user input from a service-providing peer (e.g., a PDA) to a service-receiving peer (e.g., an appliance) to allow a user to program the appliance (*id.* at col. 9, lns. 5-14). *See also* JX-5 at col. 9, lns. 15-65 (additional examples).

Microsoft’s constructions inject the unnecessary language “over which one peer provides the capability to satisfy another peer’s needs” into these terms. Neither the express claim language nor the specification – including the portions cited by Microsoft in its brief – *requires* the inclusion of this language. *See, e.g., Varco, L.P. v. Pason Sys. USA Corp.*, 436 F.3d 1368, 1373 (Fed. Cir. 2006).

**5. “selectively processing an addressed service connection”
(Claim 1)**

Claim Term	Motorola Construction	Microsoft Construction
“selectively processing an addressed service connection” (Claim 1)	selectively using an addressed connection for the provision of one or more services	establishing an “addressed service connection” if the capability of one peer matches the need of the other peer

The claim term “selectively processing an addressed service connection” appears in the third step of independent claim 1. JX-5 at col. 10, lns. 27-42.

Motorola construes the term to mean “selectively using an addressed connection for the provision of one or more services.” Compls. Br. at 23. Microsoft construes the term to mean “establishing an ‘addressed service connection’ if the capability of one peer matches the need of the other peer.” Resp. Br. at 118.

As proposed by Motorola, the claim term “selectively processing an addressed service connection” is construed to mean “selectively using an addressed connection for

PUBLIC VERSION

the provision of one or more services.”

The dispute between the parties is whether “processing” means using a connection for the provision of services (as Motorola proposes), or is limited to just “establishing” a connection with no further processing once established (as Microsoft proposes). Motorola’s construction is consistent with the express claim language and the teachings of the ‘896 patent.

As explained above, a service connection is used to provide various services from one peer to another. *See JX-5 at col. 8, ln 63-col. 9, ln. 65.* The ‘896 patent explains that “FIG. 10 shows a flow chart of process service connection procedure 92. Procedure 92 illustrates a collection of tasks which can be performed at a service-providing peer 20 in support of a service connection.” JX-5 at col. 8, lns. 56-59 (emphases added). As explained in the patent, Figure 10 shows examples of the different types of services that can be provided (*i.e.*, processed) after the service connection is established. For example:

[Process Service Connection] Procedure 92 performs a task 94 to provide a network relay, router, or gateway capability for a service-receiving peer 20 of network 22 through an established service connection. During task 94, a service-providing peer 20 relays data communications between the connected peer 20 and a remote device 34 (see FIG. 1). After task 94, program flow returns to process 56 (see FIG. 6). Task 94 may be used to extend the service connection to the Internet or other network.

* * *

[Process Service Connection] Procedure 92 performs a control appliance process 102 to support the controlling of appliances. Tasks 104, 106, and 108 of process 102 are performed to program an appliance peer 20 with personalization data 52 (see FIG. 2). During task 104, a service-providing peer 20 gets personalization data 52 from the connected, service-receiving peer 20 using the service

PUBLIC VERSION

connection. Next, task 106 translates the network compatible personalization data 52 into a format suitable for the specific appliance to be programmed with personalization data 52.

JX-5 at col. 9, lns. 5-32 (emphases added). As it is clear from the specification, processing the service connection means using the connection to provide actual services, not just “establishing” a connection.²⁷ Motorola’s construction is also consistent with Dr. Madisetti’s testimony. Madisetti Tr. 350-354.

Microsoft ignores these teachings and limits “processing” to just establishing the connection.²⁸ Microsoft also ignores the fact that the applicants used the term “establishing” elsewhere in the claims but chose to use the term “processing” in this step, further showing that “processing” does not mean “establishing.” See Madisetti Tr. 351-352; McNair Tr. 1068-70.²⁹ Microsoft’s own expert admitted that he “understands [the]

²⁷ Mr. McNair admitted that the entirety of Figure 10 shows a flowchart of a “process service connection” procedure performed at a peer. McNair Tr. 1070. He also agreed that the figure shows functions including relaying information, collecting user information, and sending user information. McNair Tr. 1070-1071. While Mr. McNair resisted admitting that Figure 10 reflects a procedure (as opposed to a label) (see, e.g., McNair Tr. 1070-1076), he ultimately admitted that Figure 10 appears to be a procedure. McNair Tr. 1077. Mr. McNair also admitted that in Figure 6, the box “process a service connection” is a procedure followed after negotiation is successful. McNair Tr. 1074. Thus, even according to Microsoft’s own expert, a service connection must be more than a mere “establishing.” Further, the patent specification states that the tasks identified in Figure 10 take place over an “established” service connection. See JX-5 at col. 8, ln. 63-col. 9, ln. 7 (tasks 92 and 94).

²⁸ While the patent does provide that “[d]uring procedure 92, a one-to-one, addressed connection is established between peers 20 to perform network services” (JX-5 at col. 8, lns. 42-44), Figure 10 and the related discussion in the ‘896 patent make it abundantly clear that “processing” is not just “establishing” the connection. It involves the actual provision of the various services that are set forth in Figure 10 as described in column 9 of the ‘896 patent.

²⁹ Mr. McNair agreed during his deposition that processing a service connection meant relaying information, collecting user information, and sending user information, despite

PUBLIC VERSION

logic" that if the applicants had meant "establishing" in this context they would have used the word "establishing" since it appears in the prior claim steps. McNair Tr. 1069.

6. "physical proximity" (Claim 12)

Claim Term	Motorola Construction	Microsoft Construction
"physical proximity" (Claim 12)	within range of a peer in a low power wireless network	within a predetermined distance from each other

The claim term "physical proximity" appears in step a) of independent claim 12. JX-5 at col. 11, ln. 46 – col. 12, ln. 13.

Motorola construes the term to mean "within range of a peer in a low power wireless network." Compls. Br. at 25. Microsoft construes the term to mean "within a predetermined distance from each other." Resp. Br. at 123.

As proposed by Motorola, the claim term "physical proximity" is construed to mean "within range of a peer in a low power wireless network."

Motorola's construction of "physical proximity" is consistent with the express teachings of the '896 patent. The '896 patent explains:

FIG. 1 depicts a detection zone 28 surrounding each peer 20. In the preferred embodiments, wireless communication links 26 for the vast majority of peers 20 are operated at a sufficiently low power so that a wireless communication range for a given peer 20 is preferably less than 5 meters, although the range may be much greater, for the typical peer 20.

* * *

While a peer 20 may potentially connect through network 22 with a vast multitude of peers 20, the use of low power

the fact that he was unwilling to agree to that position during the hearing. McNair Tr. 1070-1072.

PUBLIC VERSION

wireless communication links 26 limits the number of potential connections at any given instant in time to those peers 20 which are physically proximate to one another. In other words, only when a first peer 20 resides in the detection zone 28 of a second peer 20 and that second peer 20 resides in the detection zone 28 of the first peer 20 can a connection through network 22 occur.

JX-5 at col. 3, lns. 58-64 and col. 4, lns. 8-16 (emphases added).

Generally, task 58 allows a first peer 20 to determine whether a second peer 20 is physically proximate to the first peer 20. Task 58 causes transmit and receive section 38 (see FIG. 2) to monitor wireless communication link 26 (see FIG. 1) to determine whether a signal compatible with a protocol being used by network 22 (see FIG. 1) can be received. Due to the above-described low transmission power levels used by peers 20, when a signal is detected, the peer 20 sending the signal is located near the receiving peer 20.

JX-5 at col. 5, ln. 66-col. 6, ln 7 (emphases added). Thus, in the context of the ‘896 patent, “physically proximate” means within the range of a peer in a low-power wireless network. CX-712C (Madisetti WS) at 20-21; Madisetti Tr. 242.

Mr. McNair contends that to determine whether it is “physically proximate,” a peer must measure in inches or meters how far it is from another peer.³⁰ He admitted, however, that no means of making such a measurement is disclosed in the ‘896 patent. McNair Tr. 1042-1043.³¹ Moreover, there is nothing in the patent to suggest that “physically proximate” means anything other than “near,” and certainly nothing to

³⁰ Mr. McNair originally testified that each peer must make such a measurement. RRX-68C (McNair RWS) at 39-40. Yet, at the hearing, Mr. McNair suggested only that one peer must measure. McNair Tr. 1036-1037.

³¹ Mr. McNair’s testimony about the construction of this term is suspect for other reasons as well. For instance, while testifying, Mr. McNair was concerned about the accuracy of a statement in the patent itself dealing with physical proximity. McNair Tr. 1041-1042.

PUBLIC VERSION

suggest that detecting physical proximity requires peers to perform measurements of how far away they are from other peers. Indeed, the '896 patent explains peers might operate at a range of "preferably less than 5 meters" up to some distance "much greater." JX-5 at col. 3, lns. 62-63. Thus, physical proximity, as used in the patent, is not based on some peer-measured predetermined distance between peers, but rather on the peers being sufficiently near to one another for them to communicate effectively using low power communication.³²

7. "authorizing said second peer to establish said setup connection with said first peer based on said identification of said first peer" (Claim 1)

Claim Term	Motorola Construction	Microsoft Construction
"authorizing said second peer to establish said setup connection with said first peer based on said identification of said first peer" (Claim 1)	permitting said second peer to establish said setup connection with said first peer as a result of said identification of said first peer	determining, using the identification of the first peer, if the second peer should establish the "setup connection" based on whether the first peer has permission to establish a setup connection with said second peer

The claim term "authorizing said second peer to establish said setup connection with said first peer based on said identification of said first peer" is the second step of independent claim 1. JX-5 at col. 10, lns. 27-42.

Motorola construes the term to mean "permitting said second peer to establish said setup connection with said first peer as a result of said identification of said first

³² As Dr. Madisetti testified, "[o]ne of ordinary skill in the art would appreciate that the distance at which nodes can communicate cannot be predetermined but would be dependent on the conditions of the wireless channel, presence of noise, and other impairments, as well as the power applied at the transmitter." CX-712C (Madisetti WS) at 21.

PUBLIC VERSION

peer.” Compls. Br. at 26. Microsoft construes the term to mean “determining, using the identification of the first peer, if the second peer should establish the ‘setup connection’ based on whether the first peer has permission to establish a setup connection with said second peer.” Resp. Br. at 124.

As proposed by Motorola, the claim term “authorizing said second peer to establish said setup connection with said first peer based on said identification of said first peer” is construed to mean “permitting said second peer to establish said setup connection with said first peer as a result of said identification of said first peer.”

Motorola’s construction is based on the plain language of the claim and the teachings of the ‘896 patent. *See JX-5 at col. 6, lns. 41-52, col. 7, lns. 40-59.*

Microsoft’s construction lacks logic and clarity. For example, “authorizing” does not mean determining if the peer “should establish” a connection, as Microsoft proposes. Rather, authorizing means actually permitting the connection to take place. *See, e.g., JX-5 at col. 7, lns. 42-45.* Nor does “authorizing said second peer” necessarily have anything to do with “whether the first peer has permission.” While there may be circumstances in which authorizing said second peer may involve consideration of whether the first peer has permission, nothing in the ‘896 patent limits the claim to this scenario.

8. “authorization information” (Claim 12)

Claim Term	Motorola Construction	Microsoft Construction
“authorization information” (Claim 12)	information used for authorization	one or more code numbers or passwords that provide permission to use a resource

The claim term “authorization information” appears in step d) of independent claim 12. *JX-5 at col. 11, ln. 46 – col. 12, ln. 13.*

PUBLIC VERSION

Motorola construes the term to mean “information used for authorization.” Compls. Br. at 27. Microsoft construes the term to mean “one or more code numbers or passwords that provide permission to use a resource.” Resp. Br. at 125.

As proposed by Motorola, the claim term “authorization information” is construed to mean “information used for authorization.”

Motorola’s construction is based on the plain language of the claim. “Authorization information” is information used for authorization—nothing in the patent requires a more limited construction. Nor is there any support in the patent to limit “authorization information” to only passwords or code numbers, as Microsoft proposes.

Although the ‘896 patent discloses passwords, it does so in the context of “personalization data” (JX-5 at col. 4, lns. 64-66), not authorization information. The patent discloses that an “authorization key 68” includes “one or more data codes.” *Id.* at col. 6, lns. 49-50. However, message 64 is “exemplary” (*Id.* at col. 6, lns. 41-43) and, accordingly, cannot limit the claims. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (“Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using ‘words or expressions of manifest exclusion or restriction.’”). Therefore, there is nothing in the ‘896 patent that limits authorization information in the manner proposed by Microsoft.

9. “authorized through an identification code” (Claim 12)

Claim Term	Motorola Construction	Microsoft Construction
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PUBLIC VERSION

"authorized through an identification code" (Claim 12)	permitted using an identification code	determining, using the identification code, whether the service-requesting peer has permission to establish a wireless service connection with the service-providing peer
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The claim term "authorized through an identification code" appears in step e) of independent claim 12. JX-5 at col. 11, ln. 46 – col. 12, ln. 13.

Motorola construes the term to mean "permitted using an identification code." Compls. Br. at 28. Microsoft construes the term to mean "determining, using the identification code, whether the service-requesting peer has permission to establish a wireless service connection with the service-providing peer." Resp. Br. at 126.

As proposed by Motorola, the claim term "authorized through an identification code" is construed to mean "permitted using an identification code."

Motorola's construction is based on the plain language of the claim and the teachings of the '896 patent. In the '896 patent, "authorizing" means permitting. This is shown, for example, in steps 78 and 80 of Figure 6. Assuming there is authorization, further communication is permitted, including, for example, an exchange of needs and capabilities as shown in step 82. *See* JX-5 at col. 7, lns. 39-59.

Microsoft improperly injects unnecessary words into its construction and ignores the claim language. For example, the phrase "authorized through an identification code" does not include any claim term that would require the inclusion of the phrases "service-requesting peer," "service-providing peer" or "establish a wireless service connection." The inclusion of these terms elsewhere in the claim confirms that their inclusion in the construction of "authorized through an identification code" is superfluous and incorrect.

PUBLIC VERSION**10. “exchanging needs and capabilities between said first and second peers” (claim 1)**

Claim Term	Motorola Construction	Microsoft Construction
“exchanging needs and capabilities between said first and second peers” (claim 1)	the first and second peers transmit to each other information about their respective needs (if any) and capabilities (if any)	both the first and second peers sending their needs to the other peer and receiving from the other peer that other peer’s capabilities

The claim term “exchanging needs and capabilities between said first and second peers” appears in the third step of independent claim 1. JX-5 at col. 10, lns. 27-42.

Motorola construes the term to mean “the first and second peers transmit to each other information about their respective needs (if any) and capabilities (if any).” Compls. Br. at 28. Microsoft construes the term to mean “both the first and second peers sending their needs to the other peer and receiving from the other peer that other peer’s capabilities.” Resp. Br. at 126-27.

As proposed by Motorola, the claim term “exchanging needs and capabilities between said first and second peers” is construed to mean “the first and second peers transmit to each other information about their respective needs (if any) and capabilities (if any).”

The primary dispute between the parties is whether the first and second peers are each required to both (1) send a need to the other peer and (2) receive a capability from the other peer. Microsoft requires this; Motorola does not.

The ‘896 patent discloses that peers exchange information about needs and capabilities. This, however, does not mean that a peer must always have both a current need and an available capability to exchange. A peer may have just a current need or an

PUBLIC VERSION

available capability. The '896 patent disclosure makes this explicitly clear:

Referring back to FIG. 7, need/capability message 64 includes those codes from tables 74 and 76 (see FIGS. 8-9) that currently apply. While a peer 20 may have more than one need or capability at a given instant, nothing requires a peer 20 to have multiple needs or capabilities. Moreover, nothing requires a peer 20 to have both a network need and a network capability. Message 64 serves as a need message if a peer need is specified regardless of whether a peer capability is specified and as a capability message if a peer capability is specified regardless of whether a peer need is specified.

JX-5 at col. 7, lns. 26-36 (emphases added).³³ Consistent with Motorola's construction, these passages confirm that when needs and capabilities are exchanged (task 82 in FIG. 6), the peers will transmit to each other information about only their respective current needs (if any) and available capabilities (if any)—not necessarily both. Madisetti Tr. 175-176.

Because Microsoft's construction arguably requires that each peer communicate **both** a need and a capability, it is wrong and must be rejected. Microsoft points to FIG. 7 of the patent to support its position. However, even Microsoft's own expert admits that this figure showing a possible data format for need/capability messages is merely exemplary. McNair Tr. 1144-1145.

³³ Furthermore, the '896 patent further explains that, "If authorization is accepted, a task 82 evaluates peer needs with peer capabilities. In other words, task 82 causes the message-receiving peer to compare its available capabilities (if any) to any needs listed in a received unsolicited need/capability message 64 (see FIG. 7) and to compare its available needs (if any) to any capabilities listed in the message 64. After task 82, a query task 84 acts upon the result of the evaluation of task 82." JX-5 at col. 7, lns. 60-67 (emphases added).

PUBLIC VERSION**B. Infringement Analysis of the '896 Patent****1. Accused Products**

Motorola argues that at least the following products are accused products: all versions and configurations of the Microsoft Xbox 360 console imported into the United States and/or sold after importation into the United States on or after December 17, 2010, including but not limited to the Xbox 360 4 GB Console and the Xbox 360 250 GB Console; as well as all wireless accessories, including but not limited to the Xbox 360 Wireless Controller, Xbox 360 Wireless Controller Play and Charge Kit, Wireless Controller with Transforming D-Pad and Play and Charge Kit, Xbox 360 Halo: Reach Wireless Controller, Fable III Limited Edition Wireless Controller, Xbox 360 Wireless Headset, Xbox 360 Halo: Reach Wireless Headset, Xbox 360 Wireless Speed Wheel, Xbox 360 Wireless Microphone, and Xbox 360 ChatPad. Compls. Br. at 29-30 citing CX-712C (Madisetti WS) at 3.

Microsoft does not dispute this.

2. Direct Infringement

For the reasons set forth below, Motorola has shown that Microsoft's accused products directly infringe all asserted claims of the '896 patent.

Claim 1

The preamble of independent method claim 1 recites:

In a capability addressable peer-to-peer data communication network, a method of establishing network connectivity comprising the steps of:

Motorola has established that this claim limitation is satisfied.

PUBLIC VERSION

The method of claim 1 is performed whenever the Xbox console and an accessory device go through the discovery process. CX-712C (Madisetti WS) at 67-68. Portions of the method are further satisfied during subsequent negotiations between the Xbox console and an accessory device, relating to needs for additional or modified services. CX-712C (Madisetti WS) at 68.

The claim term “peer-to-peer” has been construed to mean “having at least common portions of communications protocol and/or capability and does not refer to equivalence of physical size, functional capability, data processing capacity or transmitter/receiver range or power.” Additionally, the term “capability addressable peer-to-peer data communication network” has been construed to mean “a peer-to-peer data communications network where messages may be addressed in some manner related to capability.”

The Xbox console and accessory devices operate in a “capability addressable” data communication network. CX-712C (Madisetti WS) at 68. The Xbox console and accessory devices operate in a network where messages may be addressed in some manner related to capability. For example, force feedback messages will be sent only to devices that provide force feedback capability, CX-712C (Madisetti WS) at 66-67; CX-639C 23-24 (RFA 170-172); Russo Tr. 1018; CX-650C (Russo Dep. Tr.) 65; McNair Tr. 1094-1098; rumble messages will be sent only to devices that provide rumble capability, Russo Tr. 1018; and audio data will be sent only to devices that provide a speaker output capability, Russo Tr. 1018; McNair Tr. 1094-1098.

The network is “peer-to-peer.” Consistent with the ‘896 patent’s explicit definition of the term (which Motorola proposes as the proper construction), the Xbox

PUBLIC VERSION

360 console and wireless accessories share portions of the Xenon Wireless Protocol.³⁴ CX-712C (Madisetti WS) at 68; RX-319C (Russo WS) at 2 (protocol had to be “robust”); CX-521C (Xenon Spec.). For example, the console and accessory devices share understandings of a TDMA kind of framework,³⁵ McNair Tr. 1083-1088; CX-521C (Xenon Spec.) at 17 & Figs. 5-1 and 5-2; CX-712C (Madisetti WS) at 26-28; share common frequency channels, McNair Tr. 1089; CX-712C (Madisetti WS) at 32; CX-521C (Xenon Spec.) at 22-24 & Tbl. 5-6; share encryption technique and parameters, McNair Tr. 1089; share common forward error correction techniques, McNair Tr. 1089-1090; CX-712C (Madisetti WS) at 33; CX-521C (Xenon Spec.) at 20; share common scrambling techniques, McNair Tr. 1090; share knowledge of a frequency hopping pattern, McNair Tr. 1091; CX-712C (Madisetti WS) at 31-32; CX-521C (Xenon Spec.) at 51 & Fig. 10-2; share a common synchronization pattern, CX-712C (Madisetti WS) at 32; CX-521C (Xenon Spec.) at 19 & Tbl. 5-2; and understand each other’s messaging formats, Russo Tr. 1018-1019. *See also* Madisetti Tr. 274-277.

³⁴ Microsoft’s expert, Mr. McNair, asserts that the Xenon Wireless Protocol is not a protocol. RRX-68C (McNair RWS) at 14. Mr. McNair’s testimony cannot be squared with Microsoft’s Xenon Wireless Protocol Specification, which not only uses “Protocol” in its title, but says in its first sentence that “The purpose of this document is to describe the protocol for Xenon Wireless game pad as it occurs on the RF air interface.” CX-521C (Xenon Spec.) 13. Mr. McNair’s testimony also cannot be squared with the sworn testimony of Microsoft engineer David Russo, who repeatedly referred to the Xenon Wireless Protocol Specification as a “protocol” after explaining that wireless operations are a “key part” of his responsibilities. RRX-96C (Russo) 1; RX-319C (Russo WS) at 9. On cross-examination, Mr. McNair attempted to dismiss this sworn testimony of Microsoft’s engineer as “not well thought through.” McNair Tr. 1081.

³⁵ Although in his Rebuttal Witness Statement Mr. McNair stated that “TDMA is not a protocol,” the ‘896 expressly states otherwise. On cross-examination Mr. McNair admitted that he describes TDMA as a protocol when he is working as an engineer rather than testifying for Microsoft. RRX-68C (McNair RWS) at 21; JX-5 at col. 3, lns 50-56; McNair Tr. 1087-1088.

PUBLIC VERSION

The first step of claim 1 recites:

initiating a setup connection between first and second peers of said network by transmitting an unsolicited message containing an identification of said first peer to said second peer;

Motorola has established that this claim limitation is satisfied.

The claim term “setup wireless connection” has been construed to mean “an initial connection over which two peers can negotiate an addressed service connection.” Additionally, the term “peer” has been construed to mean “a computer or microprocessor controlled electronic device in a peer-to-peer network.”

The Xbox system performs this step. CX-712C (Madisetti WS) at 69.

Specifically, the Xbox console automatically transmits a broadcast message in each frame. CX-712C (Madisetti WS) at 28-29, 69; CX-521C (Xenon Spec.) at 17 Figs. 5-1 and 5-2, 49 (“The broadcast packet . . . is repeated automatically in every frame.”), 81 Fig 17-1 (“host sends broadcast packet”), 82; Madisetti Tr. 333-335, 346; McNair Tr. 1048-1049. This message is unsolicited—it is broadcast automatically [] and is not solicited by the accessory device. CX-712C (Madisetti WS) at 38-39, 71; Madisetti Tr. 206; 208; 334-335; McNair Tr. 1048-50 (“Q. It’s not sent in response to any solicitation from another network node, correct? A. That’s correct.”).

The broadcast message includes the [] CX-712C (Madisetti WS) at 29, 69, 71; CX-521C (Xenon Spec.) at 50 Fig. 10-2; CX-650C (Russo Dep. Tr.) 25; Madisetti Tr. 212-213; CX-639C 17 (RFA 157). The Host XID is [] and the Host ID is [] CX-712C (Madisetti WS) at 71; CX-521C

PUBLIC VERSION

(Xenon Spec.) at 13.

The broadcast message initiates a setup connection. CX-712C (Madisetti WS) at 72; RX-319C (Russo WS) at 9; Madisetti Tr. 334-335.³⁶ When a controller receives the unsolicited message, it sends a link control request message back to the first peer (console). *Id.*

When an accessory device is within range of the console, it will receive the broadcast packet. CX-712C (Madisetti WS) at 69-70; CX-521C (Xenon Spec.) at 83 Fig. 17-2 (Showing path from “Received it?” to “Select one channel and stay on it for the broadcast packet”).

The Xbox console and accessory devices are microprocessor-based electronic devices that share portions of the Xenon Wireless Protocol with each other, as discussed above. CX-712C (Madisetti WS) at 70-71; Madisetti Tr. 197; 273-277. Additionally, consistent with Microsoft’s construction of “peer,” each device can establish a network, CX-521C (Xenon Spec.) at 83 (“[D]evice and host establish the RF link. Either side can reject or release the link”); and each can initiate a connection without the involvement of servers, RX-319C (Russo WS) at 9 (console initiates connection); CX-521C (Xenon Spec.) at 84 (“The data link is initiated from the Wireless Device.”); Madisetti Tr. 268; 335 (server not required).

The transmission of the broadcast message by the Xbox console, as detailed

³⁶ Microsoft’s expert agrees that the broadcast packet is not sent in response to a node request and that it is ever present. He also agrees that the broadcast packet is not sent in response to any solicitation from another network node and that it is sent continuously every 8 ms even when there is no wireless accessory within range. McNair Tr. 1049-1051. Inexplicably, Mr. McNair asserts that this broadcast packet is not an unsolicited message. McNair Tr. 1049.

PUBLIC VERSION

above, invites the creation of a wireless connection between the console and an accessory device that can be used to negotiate an addressed service connection. CX-712C (Madisetti WS) at 72; Madisetti Tr. 208. Specifically, the broadcast message, as per the Xenon Protocol, provides frequency hopping, timing and error-correction information, along with other shared protocol information, that enables an initial wireless connection between the console—the first peer—and the accessory device—the second peer. Madisetti Tr. 201-202; 208.

As explained more fully with respect to the “exchanging” and “selectively processing” steps, the initial connection between the Xbox console and accessory devices is used to exchange needs and capabilities to determine whether to create an addressed service connection and therefore meets the requirements of Microsoft’s construction of “setup connection” as well. CX-712C (Madisetti WS) at 72.

The second step of claim 1 recites:

authorizing said second peer to establish said setup connection with said first peer based on said identification of said first peer:

Motorola has established that this claim limitation is satisfied.

The claim term “authorizing said second peer to establish said setup connection with said first peer based on said identification of said first peer” has been construed to mean “permitting said second peer to establish said setup connection with said first peer as a result of said identification of said first peer.”

The Xbox system performs this step of claim 1. CX-712C (Madisetti WS) at 72. “Permitting said second peer to establish said setup connection with said first peer as a result of said identification of said first peer”—the accessory device will compare the

PUBLIC VERSION

Host XID information contained in the header of the Xbox console's broadcast message to the Host XID information stored in the accessory device to determine whether it is permitted to establish a setup connection.³⁷ CX-712C (Madisetti WS) at 39, 73; Madisetti Tr. 240-241; CX-521C (Xenon Spec.) at 81 ("Validation"), 83 Fig. 17-2 ("Match host ID?"); CX-650C (Russo Dep. Tr.) 54-55. If the two sets of information do not match, then no connection will be established. CX-712C (Madisetti WS) at 40, 73; McNair Tr. 1051-52; CX-521C (Xenon Spec.) at 83 Fig. 17-2 ("No"); Russo Tr. 1051-1052. But if the two sets of information do match, then the device will be permitted to establish an initial connection with the Xbox console. CX-712C (Madisetti WS) at 73; McNair Tr. 1050-1051; CX-521C (Xenon Spec.) at 81 (Validation), 83 Fig. 17-2 ("Yes"); Russo Tr. 1051-1052.

The third step of claim 1 recites:

exchanging needs and capabilities between said first and second peers after establishing said setup connection; and

Motorola has established that this claim limitation is satisfied.

The claim term "exchanging needs and capabilities between said first and second peers" has been construed to mean "the first and second peers transmit to each other information about their respective needs (if any) and capabilities (if any)."

³⁷ The accessory device stores Host ID information in its non-volatile memory during an earlier "binding" process, which "is to set up the association between console host and the wireless peripherals." CX-521C (Xenon Spec.) 78; CX-712C (Madisetti WS) at 34, 40. The binding process is a simple process that involves two button presses. Russo Tr. 1026-1027; Madisetti Tr. 338-342. The binding process, which enables the subsequent wireless connections that infringe the patent, is described in detail in Section 16 of the Xenon Wireless Protocol Specification. CX-521C (Xenon Spec.) 78-80.

PUBLIC VERSION

The Xbox system performs this step. CX-712C (Madisetti WS) at 74.

Specifically, the Xbox console and an accessory device engage in several exchanges of needs and capabilities, both during the discovery process and subsequent to the discovery process. *Id.* For example, during the discovery process, [

]³⁸ CX-521C (Xenon Spec.) at 81, 83 & Fig. 17-2; CX-712C (Madisetti WS) at 43, 74; McNair Tr. 1066. Specifically, a [

] CX-521C (Xenon Spec.) at 37 Tbl. 7-17; [

] CX-521C (Xenon Spec.) at 44-45 Fig. 8-5. CX-712C (Madisetti WS) at 43, 74-75; Madisetti Tr. 214-216, 346-347; Russo Tr. 1017-1018.

As another example, [

] See CX-521C (Xenon Spec.) at 82-83 & Fig. 17-1 [

³⁸ Microsoft asserts that link control packets relate only to the assignment of logical communication ports, not to functionality that the Xbox console can provide. This is incorrect. The Xbox console has [

] CX-712C (Madisetti WS) at 40-42; Madisetti Tr. 214-216; CX-650C (Russo Dep. Tr.) 34. These are capabilities that respond to specific needs.

PUBLIC VERSION

]; CX-712C (Madisetti WS) at 44, 75-76; Madisetti Tr. 346-348.³⁹

As another example, [

] CX-

712C (Madisetti WS) at 45, 76-77; CX-521C (Xenon Spec.) at 83 Fig. 17-2. If the device is a data-type accessory device, such as a game controller, [

] CX-521C (Xenon Spec.) at 37 Tbl. 7-18; CX-

712C (Madisetti WS) at 46-48, 77-78. The device reports, among other things, include

[] CX-712C (Madisetti WS) at 47-48, 78;

Madisetti Tr. 346-348. For example, the Controller Device Type and Version Report

includes [

] CX-521C (Xenon Spec.) at 30; CX-712C (Madisetti WS) at 48; CX-650C (Russo Dep. Tr.) 60; Russo Tr. 1017-1018. The Device State Report includes

[

] CX-712C

(Madisetti WS) at 49, 78; CX-521C (Xenon Spec.) at 31; Russo Tr. 1017-1018. Other device reports provide information concerning, for example, [

³⁹ Although Microsoft's expert stated during the hearing that he would not describe the Xbox 360 console as providing access to audio portions of a game session for a wireless headset, he admitted that he did agree with that statement during his deposition. McNair Tr. 1059-1060.

⁴⁰ The rumble motor will cause the controller to vibrate under certain game circumstances to enhance the gaming experience. CX-712C (Madisetti WS) at 49.

PUBLIC VERSION

[⁴¹] CX-712C (Madisetti WS) at 49-51, 78; CX-523C 8; CX-526C; CX-650C (Russo Dep. Tr.) 65. If the accessory is a voice device, the link control ACK message contains [

] CX-712C (Madisetti WS) at 51-52, 78; CX-521C (Xenon Spec.) at 45.

As another example, if the accessory is an integrated data and voice device (*i.e.*, a device with both data and voice components such as a controller with a wired headset plugged into it), the device will need the voice, as well as the data, portions of, for example, a gaming session. CX-712C (Madisetti WS) at 78-79. [

] CX-712C (Madisetti WS) at 60, 78-79; CX-521C (Xenon Spec.) at 29, 33-34; Russo Tr. 1022. The Xbox 360 console will ensure [

] CX-712C (Madisetti WS) at 61, 79; CX-521C (Xenon Spec.) at 29-30, 33-34 and 58; Madisetti Tr. 347-348.

As another example, particular games may require voice input in a particular voice data encoding format. CX-712C (Madisetti WS) at 79. The Xbox 360 system, as detailed above, [*Id.* If a game requires the use of one of these formats in particular, the Xbox console will [

] CX-712C (Madisetti

⁴¹ [

] CX-712C (Madisetti WS) at 51.

PUBLIC VERSION

WS) at 61-63, 79; Madisetti Tr. 232-33; CX-521C (Xenon Spec.) at 41, 65-66; CX-525C at 51, 62. This message is a statement of the console's "need." CX-712C (Madisetti WS) at 79; Madisetti Tr. 347-49. If a voice-type accessory is [

]

The fourth step of claim 1 recites:

**selectively processing an addressed service connection
in response to said exchange of needs and capabilities.**

Motorola has established that this claim limitation is satisfied.

The claim term "addressed service connection" has been construed to mean "a connection over which service(s) can be provided to addressed peer(s)." Additionally, the term "selectively processing an addressed service connection" has been construed to mean "selectively using an addressed connection for the provision of one or more services."

The Xbox system performs this step. CX-712C (Madisetti WS) at 80-82; Madisetti Tr. 355-356. Assuming the discovery process is completed successfully, a service connection is established. *Id.* Thereafter, the console will provide gateway or routing connectivity to the requested voice or data portion of the gaming session and will use the information it received from the accessory [] to choose whether, how, and when to request the functionalities that the accessory can offer. CX-712C (Madisetti WS) at 57, 80-82; CX-650C (Russo Dep. Tr.) 33; McNair Tr. 1055-58. For example, as detailed above, the console may select to send audio information

PUBLIC VERSION

from a game to an Xbox 360 Wireless Headset based on the needs and capabilities exchange. McNair Tr. 1059-1060. As another example, it may select to send force feedback information only to an accessory device that has force feedback capabilities, such as the Xbox Wireless Speed Wheel, or rumble information only to a device that supports rumble motor. *See CX-712C (Madisetti WS) at 58-59, 66-67, 80-82; CX-639C 23-24 (RFA 170-172); CX-650C (Russo Dep. Tr.) 65; Russo Tr. 1015-1018.*⁴² Similarly, voice information is not sent to a device incapable of processing voice. CX-712C (Madisetti WS) at 80; McNair Tr. 1094-1095.

Claim 12

The preamble of independent method claim 12 recites:

A method of operating a capability addressable peer-to-peer data communication network comprising the steps of:

Motorola has established that this claim limitation is satisfied.

The claim term “peer-to-peer” has been construed to mean “having at least common portions of communications protocol and/or capability and does not refer to equivalence of physical size, functional capability, data processing capacity or transmitter/receiver range or power.” Additionally, the claim term “capability addressable peer-to-peer data communication network” has been construed to mean “a peer-to-peer data communications network where messages may be addressed in some manner related to capability.”

⁴² While Mr. McNair testified at first that he was not convinced that force feedback is sent only to accessories that support force feedback, and admitted that he did not ask for information about this issue, he ultimately conceded the point. McNair Tr. 1094-1095.

PUBLIC VERSION

The method of claim 12 is performed whenever the Xbox console and an accessory device go through the discovery process. CX-712C (Madisetti WS) at 83.

As explained in the context of claim 1 above, if the preamble of claim 12 of the '896 patent is a limitation, the Microsoft Xbox gaming and entertainment system meets the limitation. CX-712C (Madisetti WS) at 83.

Step a) of claim 12 recites:

a) detecting, at a first one of a service-requesting peer and a service-providing peer, physical proximity of a second one of said service-requesting and service-providing peers;

Motorola has established that this claim limitation is satisfied.

The claim term "peer" has been construed to mean "a computer or microprocessor controlled electronic device in a peer-to-peer network." Additionally, the term "physical proximity" has been construed to mean "within range of a peer in a low power wireless network."

The Xbox system performs this step. CX-712C (Madisetti WS) at 83-84. As explained above, the Xbox console (service-providing peer) will transmit a broadcast packet in every frame. *Id.* When powered on, an accessory device (service-requesting peer) will listen for a broadcast packet to detect whether an appropriate console is within range. *Id.*; CX-521C (Xenon Spec.) at 81. Motorola has proposed that the term "physical proximity" means "within range of a peer in a lower power wireless network." The Xbox 360 console and accessory devices function in a short-range, low-power wireless environment with approximately a 9-10 meter range and the broadcast packet transmitted by the console will be successfully detected only if the accessory is within

PUBLIC VERSION

this range of the Xbox 360 console. CX-712C (Madisetti WS) at 85-86; Madisetti Tr.

246.

Step b) of claim 12 recites:

- b) determining whether a need for a service connection exists at one of said service-requesting and service-providing peers;**

Motorola has established that this claim limitation is satisfied.

The claim term “peer” has been construed to mean “a computer or microprocessor controlled electronic device in a peer-to-peer network.”

The Xbox system performs this step. CX-712C (Madisetti WS) at 86; Madisetti Tr. 246-48. When powered on or brought into range of an Xbox console with an active gaming session, the accessory device will determine that it has a need for a service connection. CX-712C (Madisetti WS) at 86. If the accessory device is a data-type device, then it will determine that it has a need for the Xbox 360 console to provide a specific functionality—gateway or routing connectivity to the data portions of a gaming session. *Id.* at 87. If the accessory device is a voice-type device, then it will determine that it has a need for gateway or routing connectivity to the voice portions of a gaming session. *Id.* [

]. *Id.*; CX-521C (Xenon Spec.) at 82 & Fig. 17-2.

Step c) of claim 12 recites:

- c) establishing, if said determining step identifies said need, a setup wireless connection between said service-requesting and service-providing peers;**

PUBLIC VERSION

Motorola has established that this claim limitation is satisfied.

The claim term “peer” has been construed to mean “a computer or microprocessor controlled electronic device in a peer-to-peer network.” Additionally, the term “setup wireless connection” has been construed to mean “an initial wireless connection over which two peers can negotiate an addressed service connection.”

The Xbox system performs this step. CX-712C (Madisetti WS) at 88. If the service-requesting peer—here, the accessory device—determines a need for a service connection, it will, as detailed above, [

] *Id.* at 88-89.

At this point, a setup wireless connection is established between the service-providing peer—the Xbox console—and the accessory device. *Id.*; CX-521 (Xenon Spec.) Figs. 17-1 and 17-2.

The setup wireless connection is the initial connection that is formed between the Xbox console and an accessory device during the discovery process, which is used to perform various service negotiations. CX-712C (Madisetti WS) at 89. As explained above in the context of claim 1, Microsoft’s proposed construction of “setup wireless connection”, while incorrect, is also met. *Id.* at 90.

Step d) of claim 12 recites:

d) communicating authorization information describing said service-requesting peer to said service-providing peer;

Motorola has established that this claim limitation is satisfied.

The claim term “authorization information” has been construed to mean

PUBLIC VERSION

“information used for authorization.”

The Xbox system performs this step. CX-712C (Madisetti WS) at 90. After the Xbox 360 console has [

] CX-712C (Madisetti WS) at 52-55, 90; CX-521C (Xenon Spec.) at 81-82 & Figs. 17-1 and 17-2; CX-639C 24-25 (RFA 174). During the [

] CX-712C (Madisetti WS) at 53-55, 90; CX-521C (Xenon Spec.) at 81-82 & Figs. 17-1 and 17-2; CX-639C 25 (RFA 175); CX-650C (Russo Dep. Tr.) 66-67. As part of this process, the accessory device [

] CX-712C (Madisetti WS) at 90; CX-521C (Xenon Spec.) at Fig. 17-2 [

].

[

] CX-712C (Madisetti WS) at 91.

Step e) of claim 12 recites:

e) forming a wireless service connection between said service-requesting and service-providing peers when said service-requesting peer is authorized through an identification code;

Motorola has established that this claim limitation is satisfied.

The claim term “wireless service connection” has been construed to mean “a wireless connection over which services can be provided to peers.” Additionally, the

PUBLIC VERSION

claim term “authorized through an identification code” has been construed to mean “permitted using an identification code.”

The Xbox system performs this step. CX-712C (Madisetti WS) at 92. As explained above, [

] CX-712C (Madisetti WS) at 55-57, 92-95; CX-521C (Xenon Spec.) at 81-82. If the response is incorrect, []CX-712C

(Madisetti WS) at 57, 93-94; CX-521C (Xenon Spec.) at 57; CX-650C (Russo Dep. Tr.)

68. If the response is correct, [

] CX-712C (Madisetti WS) at 94-95; CX-521C (Xenon Spec.) at 57.

[

] CX-712C (Madisetti WS) at 95;
CX-639C 26 (RFA 178); CX-521C (Xenon Spec.) at 57, 82 Fig. 17-1 [
]; CX-650C (Russo Dep. Tr.) 68.

The discovery complete message [

] CX-521C (Xenon Spec.) at 57.

The console uses the response code from the accessory device to [
]
] CX-
712C (Madisetti WS) at 95.

Step f) of claim 12 recites:

PUBLIC VERSION

f) communicating capability information describing said service-providing peer to said service-requesting peer;

Motorola has established that this claim limitation is satisfied.

The Xbox system performs this step. CX-712C (Madisetti WS) at 95-96. As detailed in the context of the “exchanging” step of claim 1, above, in response to a valid link control request packet, [] identifying its capability to provide the requested functionality—gateway or routing connectivity to the voice or data portion of a gaming session. *Id.* at 96; CX-521C (Xenon Spec.) at Fig. 17-1.

The parties agree that the term “capabilities” means “functionality that a peer can perform for another peer over a service connection; capabilities do not relate to characteristics of the connection between the peers.” The Xbox console communicates its capability to provide gateway or routing connectivity to the voice or data portion of a gaming session during the discovery process. CX-712C (Madisetti WS) at 96.

Step g) of claim 12 recites:

g) forming said wireless service connection between said service-requesting and service-providing peers when said service-providing peer is determined to have a capability compatible with said need determined in step b); and

Motorola has established that this claim limitation is satisfied.

The claim term “wireless service connection” has been construed to mean “a wireless connection over which services can be provided to peers.”

The Xbox system performs this step. CX-712C (Madisetti WS) at 96-97. A wireless service connection between an Xbox 360 console and an accessory is formed

PUBLIC VERSION

based in part on whether an appropriate voice or data portion of a slot is available (*i.e.*, a capability exists) for the type of accessory requesting service (*e.g.*, data and/or voice). *Id.* In other words, if the console cannot provide the requested functionality, because it does not have an appropriate slot available, then no service connection will be formed with the accessory device. *Id.* This can happen, for example, if two devices attempt to connect to the same slot and no other slot is available. *Id.*

Step h) of claim 12 recites:

h) providing said capability using said service connection.

Motorola has established that this claim limitation is satisfied.

The Xbox system performs this step. CX-712C (Madisetti WS) at 97. As described above in the context of the “selectively processing” step of claim 1, once a wireless service connection has been established, the Xbox console will provide the accessory device with the appropriate portion(s) of a gaming session. CX-712C (Madisetti WS) at 57, 97-98; CX-650C (Russo Dep. Tr.) 33.

3. Indirect Infringement

Motorola has not shown that Microsoft’s accused products indirectly infringe all asserted claims of the ‘896 patent.

Motorola argues that Microsoft induces infringement and contributes to the infringement of claims 1 and 12 of the ‘896 patent. Compls. Br. at 30-31.

Microsoft argues that Motorola has not addressed all of the elements of indirect infringement. Resp. Br. at 147-50.

Motorola’s pre-hearing brief included only a single sentence on indirect

PUBLIC VERSION

infringement of the ‘896 patent. *See* Compl. P.H. Br. at 49. It did not include, and Motorola has therefore waived, any argument that the accused products lack substantial noninfringing uses or that Microsoft intends others to infringe. GR 7c; *see also* Madisetti Tr. 163.

The specific intent necessary to induce infringement “requires more than just intent to cause the acts that produce direct infringement. Beyond that threshold knowledge, the inducer must have an affirmative intent to cause direct infringement.” *Kyocera Wireless Corp. v. Int'l Trade Comm'n*, 545 F.3d 1340, 1353 (Fed. Cir. 2008) (internal citations omitted). To show specific intent based on a product that has non-infringing uses, the patentee must make an “evidentiary showing that the defendant intended that the article be used for direct infringement.” *Ricoh Co., Ltd. v. Quanta Computer Inc.*, 550 F.3d 1325, 1341 (Fed. Cir. 2008). Motorola has made no such showing.

Furthermore, Motorola offers no evidence that Microsoft had knowledge that the method in question “was both patented and infringing.” *Global-Tech*, 131 S.Ct. at 2062. Motorola also has not shown that Microsoft possessed specific intent to encourage another’s infringement. *Warner-Lambert Co. v. Apotex Corp.*, 316 F.3d 1348, 1364 (Fed. Cir. 2003) (“mere knowledge of possible infringement by others does not amount to inducement; specific intent and action to induce infringement must be proven”).

A showing of substantial non-infringing use will defeat indirect infringement. *Spansion, Inc. v. Int'l Trade Comm'n*, 629 F.3d 1331, 1353 (Fed. Cir. 2010). Madisetti acknowledged that he has not offered the opinion that the use of wired Xbox controllers infringes the ‘896 patent. Madisetti Tr. 163. Wired controllers are one obvious example

PUBLIC VERSION

of a substantial noninfringing use of an Xbox console.

C. Validity of the ‘896 Patent

Microsoft bears the burden of showing invalidity by clear and convincing evidence. *See Microsoft Corp. v. i4i Ltd. Partnership*, 131 S. Ct. 2238, 2242 (2011).

For the reasons set forth below, Microsoft has not shown by clear and convincing evidence that the asserted claims of the ‘896 patent are invalid.

1. International Patent Application PCT/NZ93/0004

The ‘004 reference does not disclose the first step of claim 1 of the ‘896 patent. Specifically, the ‘004 reference does not disclose the initiation of a setup connection by transmitting an unsolicited message and, indeed, is silent as to what initiates any connection between the nodes of the network. Although Mr. McNair testified that a beacon message serves to initiate a connection, RX-313 (McNair WS) at 17-18, the ‘004 reference explicitly teaches that beacon messages are not sent until *after* a device is connected to the network. RX-209 at 12 (“Upon connection a newly connected device sends out a beacon message . . .”).⁴³ Rather, the beacon message simply provides information as to which devices are already connected to the network. CX-721C (Madisetti RWS) at 6-7. Moreover, the ‘004 reference does not disclose a “setup connection” under either party’s proposed construction as the ‘004 reference is silent as to how new peers connect. CX-721C (Madisetti RWS) at 6-7.

⁴³ Indeed, the ‘004 reference discloses exactly the type of network which was distinguished by the applicants during prosecution of the ‘896 patent. *See JX-6* (‘896 Patent File History) at 4637 (“In contrast, applicants’ claim 1 calls for, among other things, that a setup connection between first and second peers of the network is initiated by transmitting an unsolicited message containing an identification of the first peer to the second peer.”).

PUBLIC VERSION

The ‘004 reference does not disclose the second step of claim 1 of the ‘896 patent. Specifically, there is no disclosure of any authorization step. As admitted by Mr. McNair, the concept of authorizing implies that there is a consequence for failing to authorize. McNair Tr. 1050. No such consequence is disclosed by the ‘004 reference. Mr. McNair testified that the absence of a device’s callsign on the routing list transmitted as the beacon message serves to authorize the station to transmit, allowing it to establish a setup connection. RX-313 (McNair WS) at 17-18. However, the ‘004 reference does not disclose any concept of permission to establish a connection, as required by both parties’ proposed constructions. CX-721C (Madisetti RWS) at 7-8. Nor would a person of ordinary skill in the art understand that callsigns must necessarily be used for authorization. To the contrary, callsign information can be used for a variety of other purposes. For example, the ‘004 reference expressly discloses the use of callsigns for routing, not authorization, purposes. *Id.* Moreover, as discussed above, there is no disclosure of a setup connection being established.

The ‘004 reference does not disclose the third step of claim 1 of the ‘896 patent. Specifically, the ‘004 reference does not disclose any transmission of information relating to “needs.” Mr. McNair contends that needs are communicated “by omission.” Specifically, he argues that the exchange of routing information “expresses the needs of the devices to communicate, conveying the devices they are aware of and, by omission, the devices they are not aware of and need to be made aware of.” RX-313 (McNair WS) at 19. Yet, in the ‘896 patent, communications of needs are express, not “by omission.” Moreover, the exchange of routing information does not convey anything about a need for connection or communication. Rather, the exchange simply provides the network